

THE CLASSICAL INFLUENCE IN THE ARCHITECTURE OF THE INDUS REGION, AND AFGHANISTAN. BY WILLIAM SIMPSON, R.I. [H.A.].

Read at the General Meeting, Monday 18th December 1893; and, with the illustrations, registered at Stationers' Hall as the property of the Royal Institute.

The President, J. Macvicar Anderson, in the Chair.

MR. PRESIDENT AND GENTLEMEN,-

HEN it was discovered that there existed in the old architecture of the Indus Valley details which must have been derived from a classical source, it was natural to suppose that the Greeks who followed Alexander had been the means of its introduction. The theory presented itself that Greek architects had come to Bactria during the period when the Satraps, after Alexander, ruled at Balkh. It was suggested that these architects practised in that region until the Greek style had been more or less established; that it had afterwards crossed the Hindu Kush, and filtered slowly down to the Indus. In doing this it became mixed with native features of construction, and thus produced that peculiar jumble of forms with which we are now familiar. As almost all the remains in which it has been discovered are Buddhist, Dr. Leitner gave it the title of Græco-Buddhist, the title by which the style is now generally known. Sir Alexander Cunningham at first called it "Arian"; at a later date he classed it as "Indo-Grecian"; and, as a form of the Corinthian capital is principally found in the remains, he called it "Indo-Corinthian." It has also received the name of "Indo-Bactrian." At a later date doubts arose as to its being Greek: Fergusson, one of the doubters, suggested that it might be "Indo-Roman," or even "Indo-Byzantine." It is doubtful if any other known style of architecture could be brought forward carrying with it so many aliases. Their repetition here will in themselves form a sort of index to the questions which have arisen regarding this particular style, and at the same time serve as a key to the subject of this Paper. The term "classical" has been adopted so as to avoid any assumption in the title as to the source of the influence.

It may be as well, before entering into the questions we have to deal with, to give a slight sketch of the bringing to light of this classical influence. The first hint of it I have as Third Series. Vol. I. No. 4.

yet met with dates back to 1809, when Mountstuart Elphinstone went on a political mission to the "Caubul" Court at Peshawar, which was then part of Afghanistan. In passing through the Punjab, on the return of the mission, a visit was made to the Manikyala Tope. An engraving of the monument is given in the book, and Elphinstone adds many descriptive details; he concludes by saying: "There is nothing at all Hindoo in the appearance of this "building; most of the party thought it decidedly Grecian. It was indeed as like Grecian " architecture as any building which Europeans, in remote parts of the country, could now " construct by the hands of unpractised native builders." * In 1832 Burnes visited this tope and mentions Elphinstone's criticism, but adds nothing of his own. The merit of first realising in a distinct manner the classical character of the architecture of the Indus region is, I think, due to Sir Alexander Cunningham. In 1848 he published a small volume entitled An Essay on the Arian Order of Architecture.‡ This work is founded on the old remains in Kashmir, where the influence can also be traced. The extent to which this architecture had been practised in the past was not realised until the exploration of the Peshawar Valley had been carried on for some time. The remains of Buddhist monuments were discovered at Jamalgiri, Shah-Dheri, Takht-i-Bahi, and other localities. The first of these places had been found by Cunningham in 1848, and was explored a few years afterwards by Lieutenants Lumsden and Stokes. Upon the sculptures discovered there, a Paper, contributed by E. C. Bayley, and entitled "Note on some Sculptures found in the District of Peshawur," was published in the Journal of the Asiatic Society of Bengal [vol. xxi. pp. 606-621. Calcutta, 1853].

In February 1860, when passing through the Punjab, I visited the Manikyala Tope. This was on my first visit to India, and shortly after my arrival, when I knew very little about the architecture of that country, and at the time had heard nothing about a Greek influence (I am using the term "Greek" here in its broad sense, and as including Roman, for at first there had been no consideration as to which it belonged); yet, before I had finished my sketches, the conclusion was forced on my mind that such an influence could be traced in the details of the monument. I have still in one of my sketch-books the rough sketch I made of one of the capitals, and a section of the frieze and cornice, which seemed to me to determine the point. In the following year, when I went to Kashmir, I also noticed the details in the architecture there, and they appeared to confirm my previous conclusions. In 1862, on my return from India, I read a Paper on its Architecture before the Institute [Transactions, 1861–62, pp. 165–78], in which I affirmed the existence of this classic influence.

In 1864 General Cunningham found at Maliar-ka-Mora, near Shah-Dheri, the ancient Taxila, the base of a column, formed of sandstone. This is now in the Lahore Museum, and I give a sketch of it [see fig. 1]. The column that stood upon this base was 2 feet 4\frac{3}{4} inches in diameter, and the plinth is 3 feet 8\frac{1}{2} inches square. No one with the slightest knowledge of the "Five Orders" could, after seeing this fragment, doubt the existence of a classic influence of some kind in that part of the world. Cunningham says respecting it that "it "is of very great interest, as it is the first specimen of pure Greek architecture that has yet "been discovered in the Punjab." \{ \} But four years previously I had noted this classic influence in the Manikyala Tope, which is in the Punjab.

^{*} An Account of the Kingdom of Caubul. By the Hon. Mountstuart Elphinstone. Vol. i. pp. 107-8. Professor Wilson, in his Ariana Antiqua, published in 1841, alludes to what Elphinstone had written, and says: "Although "its elevation may have been influenced by a recollection "of Grecian buildings, yet it has been since fully proved "the work of Indian artists." Professor Wilson's book is a valuable one in connection with the history of the subject; but, at the time it was written, a sufficient amount of knowledge had not been collected on which to form a

reliable judgment. This is fairly evident from the quotation given above.—W. S.

[†] Travels into Bokhara. [London, 1834.] By Lieut. Alex. Burnes, F.R.S. Vol. i. p. 65, and vol. ii. p. 470.—W. S. ‡ Published in Calcutta; it contains a number of plates of the temples of Kashmir. A copy of this rather rare volume is in the British Museum Library.—W. S. [The essay appeared originally in the Journal of the Asiatic Society of Bengal, vol. viji. p. 241, 327.]

Society of Bengal, vol. xvii. pp. 241-327.] § Archæological Survey of India, vol. ii. p. 129.—W. S.

It may have been about 1870 that Dr. Leitner made excavations in the Peshawar Valley, which resulted in the discovery of a considerable number of sculptures. These he sent home, and they were exhibited for some time at South Kensington. They are now preserved in the

Museum of the Oriental University Institute, at Woking. It was to these sculptures that Dr. Leitner gave the term "Græco-Buddhist,"a good descriptive title, if the Greek origin of the art upon them can be maintained. Dr. Leitner's labours also deserve the credit of having brought the subject prominently before the public-or at least before those who were interested in such matters—in this country.



FIG. 1. - BASE OF COLUMN FOUND AT MALIAR-KA-MORA, NORTH OF SHAH-DHERI, THE ANCIENT TAXILA. NOW IN THE LAHORE MUSEUM.

(From a Sketch by the Author.)

Such are, so far as I know, the leading points in the early history of the discovery of this influence. The explorations of the remains in the Peshawar Valley were carried on for some years, but not, it is said, in a very methodical manner. The sculptures found are now housed in a special museum, erected for the purpose, in Lahore—which, on that account, is unique of its kind. Fergusson devotes a chapter of his Indian and Eastern Architecture to the subject of this architecture, under the heading of "Gandhara Monasteries." * In the Archæological Survey of India Sir Alexander Cunningham has devoted most of vol. v., which is written by himself, to the explorations in Gandhara; and he has added an Appendix on "Ancient Indian Architecture—Indo-Persian and Indo-Grecian styles." Fergusson having expressed doubts about the influence being derived from the Greeks, it ought to be noticed here that Mr. Vincent A. Smith, of the Bengal Civil Service, lately followed up these doubts in a Paper read before the Bengal Asiatic Society.† I went carefully through this very able Paper some time ago, and regret that I have not a copy to refer to, for it was that Paper which led me, although indirectly, to write this one.

The geographical space, containing known remains which bear evidence of this influence, ought to be defined. A very few are in the Punjab, and they are situated between the Indus and the Jhelum, the Hydaspes of the Greeks. Taxila, the city which Alexander first reached after crossing the Indus, now known as Shah-Dheri, is within this space, being represented by extensive mounds. The Manikyala Tope is about forty miles to the south-east of Shah-Dheri; the Balar Tope, which is similar in its architecture, is only about four miles to the north. There are also some remains in the Salt Range. The temples in Kashmir are almost all Brahminical; but, in those that I have seen, the influence can be traced in many of the details. The locality which has produced most of the sculptures is the Peshawar Valley, the ancient Gandhara, and sometimes called the Yusufzai country—the Afghan name—from the tribe or clan of Yusuf.

ings, if they had been recorded, would have been invaluable in relation to the subject of this Paper. Apollonius de-Temple of the Sun. This last is described as having "walls of porphyry, enriched with ornaments of gold," and in it were statues "of Alexander and Porus" [chap. xxiv.]. I know that doubts exist regarding this book, but I find that some writers place more or less faith in Apollonius. It is impossible to give every reason I have for rejecting it but that next in this place in the property of th jecting it, but that portion which describes India has always appeared to me to be a concoction. - W. S.

^{* &}quot;Gandhara" was the name of the region about Peshawar at the Buddhist period.—W. S.
† Journal of the Asiatic Society of Bengal, vol. lviii. pp.

^{107-198.}

[‡] In a Paper such as this, which deals with the question of Greek architecture in India, the city of Taxila is of importance-not so much on account of Alexander's connection with it, as from the description given in the Life of Apollonius of Tyana by Philostratus. Apollonius is supposed to have visited India about the middle of the first century a.D., a date when the exact details of build-

The finding of the remains here has been due to the excavations which have been carried on. The Buddhist remains have in most cases become shapeless mounds, and the spade only can reveal what is in them. From this it will be understood that there may be much vet concealed, and new data may in the future be discovered.

The influence also exists in the Buddhist remains of Afghanistan. There are considerable districts of that country in which, up to the present, no remains of this kind have been reported—most probably because they have not been looked for, or no explorations have been made. We do know that they exist through the Khaibar, and all the way as far as Jellalabad and Gandamak; and I believe they are also found in the Kabul Valley. There are Buddhist remains on the north of the Koh-i-Baba range at Bamian, and the valleys leading down to the Oxus; but the existence of the classic influence in these—a most important point in the question—will be dealt with further on in this Paper. Our first knowledge of the remains in Afghanistan is due to Mr. Masson, but his acquaintance with architecture was not sufficient to enable him to observe the classic influence, or to define in any way the character of the style; and his drawings, published in the Ariana Antiqua, are so small that the peculiarities of detail cannot be distinguished in them.* Knowing that the architecture of Afghanistan was all but an untouched field, it was with a sense of satisfaction that I accompanied the column of General Sir Samuel Browne into the Khaibar in November 1878, when the last Afghan war began. We wintered at Jellalabad, and finally advanced as far as Gandamak. Over this space I made sketches of the remains of Buddhist architecture and of its details in such a manner as to convey a knowledge of its character; and these leave no doubt about the existence of the classic influence upon them.† I cannot speak of the Kabul Valley from my own observation, but in the Ariana Antiqua there are drawings by Masson of three topes in that locality, and the details upon them are the same as he gives in the Jellalabad topes, and from this I presume that the style in both cases is the same.

It is rather peculiar that no Buddhist remains have, so far as I have heard, been reported on the Shikarpur, Kandahar, and Ghazni route to Kabul. I have often inquired of those who have passed in this direction, but could hear of none. The likelihood is that no one has taken the trouble to look for such things.§ I doubt if any remains of the kind will be found in Kaffiristan. We have descriptions of their temples, which are not very trustworthy; but, so far as they are described, we may conclude that they are not Buddhist. Mohammedanism never penetrated into this mountain region, which is the reason the inhabitants are now known as "Kaffirs"; and I should doubt if Buddhism ever reached these people; but in the valleys leading to the mountains, such as the Swat and Kunar Valleys, I believe there are Buddhist remains

^{*} Masson wandered about Afghanistan and neighbouring countries for many years, beginning about 1826, till the Afghan war, or about 1840. He was a man of considerable ability, and he made excavations into the topes about Jellalabad and Kabul. His object was not architecture, but coins, and he contributed a large quantity of the Indo-Scythian coins, of which there is a splendid collection now in the India Office. Besides his contribution to the Ariana Antiqua, which was edited by Prof. Wilson, Masson published four volumes of his wanderings. It is understood that he deserted from the artillery in India, but his services in procuring coins &c. were so valuable that the late James Prinsep procured his pardon, and he acted in some political capacity during the Afghan war. Honigberger, who had been thirty-five years in Runjit service, returned to Europe in 1833 through Afghanistan, Bokhara, and Russia. In passing through Afghanistan he met Masson, and dug into some of the topes at Jellalabad, finding coins, relics, &c., which he brought to Europe with him. Accounts of his excavations were

published, but, so far as I know, they throw no light on the architecture.—W. S.

[†] I read a Paper to the Institute on my return. Its title was "Buddhist Architecture in the Jellalabad Valley" (Transactions, 1879-80, pp. 37-64). I also read a Paper before the Royal Asiatic Society on "The Buddhist Caves of Afghanistan," which is published in the Journal of the Roy. As. Soc., vol. xiv. part 3. It ought to be mentioned that Mr. Beglar, one of the gentlemen of the Archæological Survey Department, made some excavations at Ali Musjid during the war, and laid bare some groups of small topes and other structures.—W. S.

[†] Ariana Antiqua, pl. ix. These are the topes of Shevaki, Korrindar, and Darrah.—W.S.

[§] Hiuen Tsiang, on his return journey to China, went by this route; at least, he mentions Ghazni, and says there were "some ten stupas built by Asoka-raja" at it. See Prof. Beal's Records of Western Countries, vol. ii. p. 284. Sangharamas, or monasteries, are also mentioned on this route.—W. S.

which have not yet been explored. In March 1879, when in camp at Jellalabad, I accompanied Major Stewart of the Guides, with an escort, a short distance up the Kunar Valley, to Konadeh and Islampur, about fourteen miles distant. At both of these places there are Buddhist remains, and the people told us there were more of them higher up the valley.

The words of Professor Wilson regarding this style, that it may perhaps have been "influ"enced by a recollection of Grecian buildings," might suggest that we have to deal with temples
somewhat similar in form to those in Greece or Rome. A notion of this kind would be very far
from the truth. We may take the Taj at Agra as an example; it is a purely Mohammedan
tomb, so far as form and construction are concerned, but we can detect a European style in its
ornamentation. It is the same with the structures under consideration; they were purely
Buddhist, but we can easily trace an influence in their ornamentation which must have come
from some classic source. A Buddhist tope in this style has preserved every form and feature

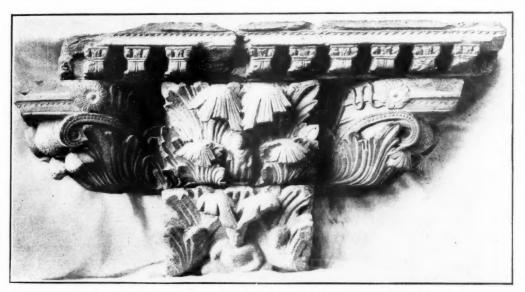


FIG. 2.—FRAGMENTS OF A CORNICE AND CAPITAL OR CAPITALS FROM THE PESHAWAR VALLEY.
(From a Photograph.)

peculiar to itself; but many of its mouldings, its pilasters, and their capitals, as well as its sculptures, bear evidence of this influence. The art, it ought to be stated, is of a very mixed character, for these classic details are combined with bell-shaped capitals, which are acknowledged to be the same as those at Persepolis; and there are also forms derived from India, as well as some which, I have concluded, belonged originally to Afghanistan, and probably to a considerable portion of the Himalayas. This curious agglomeration of forms naturally produces a strange jumble; and yet it seems to have been practised for a sufficient length of time to have become stereotyped into an established style. These words are correct enough so far as the Peshawar Valley and Afghanistan are concerned; but they do not apply to Kashmir, nor, indeed, would they be quite right in relation to any of the remains in the Punjab. The Kashmir temples are Brahminical, and belong to a later date than the Buddhist, which may account so far for the difference; but, at the same time, there is no similarity in the structural forms of the two. In the Peshawar Valley, where mounds only are found, little beyond the foundations and lower

courses of the buildings now remain. In the Jellalabad Valley many of the topes are still standing, but in a mutilated condition. The umbrellas which surmounted them are of course gone, and the same with the *tees*, while in none of them is the dome perfect; but there are so many left, that, although fragmentary, I was able to bring home from them a sufficient quantity of

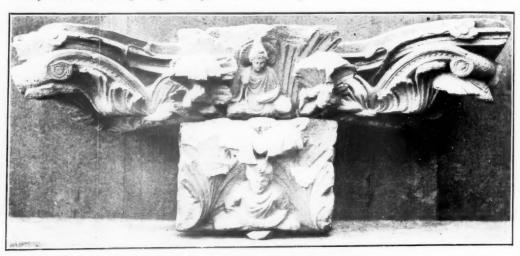


FIG. 3.—FRAGMENTS OF A CAPITAL OR CAPITALS FROM THE PESHAWAR VALLEY.

(From a Photograph.)

details to restore one on paper, in which every point might be depended upon, except the dome and umbrellas [Transactions, 1879–80, pl. v.]. Although the topes in the Jellalabad Valley remain in their ruined condition, none of the monasteries are left; foundations are visible in some cases, but only in one place did I find some fragments of a wall. This was at the Ishpola Tope, in the Khaibar Pass; and there was a portion of a window left, which sloped inwards towards the

FIG. 4. - CAPITAL FROM JAMALGIRI, PESHAWAR VALLEY. (From FERGUSSON's Indian and Eastern Architecture, p. 172.)

top—a point of some importance, as I believe it was a feature of the early architecture of the region.

A form of the Corinthian Order is found in almost all the Buddhist remains of the Indus Valley and Afghanistan [figs. 2, 3, 4]. The exceptions are few. In saying that it is Corinthian, it must not be supposed that it is an exact imitation of that Order. The remains only show a rude copy, which has been recognised as Corinthian, and it is now accepted that it has been either derived

from Greek or from Roman models of some kind. In combining it with other forms, fragments of the Order only have been introduced; pilasters are found at times in which the mouldings of the base are classic. In some cases the capital is added, but over this there is often placed a dwarf pillar with the Persepolitan bell-capital. Sometimes the frieze may be

recognised as classic; at times there is no frieze. Instead of its being the Corinthian Order, it might be described as only a sort of patchwork, in which touches of Corinthian can be made out. The Indo-Corinthian capitals are generally short and stumpy; large ones, which have stood upon round columns, are found to have been in two pieces; the lower stone had upon it one, and sometimes two rows of leaves. On the upper one are more leaves, with the scrolls. Some have a lotus or other flowers, the stems of which wind about on the upper part of the capital. In these larger capitals there is generally an abacus, which bends upwards from the centre, the line of which follows partly the curve of the scroll. [See figs. 2, 3, 4.] In many of the pilaster

capitals there is no abacus, but an extended plinth, which I take to be a survival of the primitive wooden bracket, examples of which I have seen still existing in the rudely-constructed houses of Afghanistan. The character which this bracket assumed will be seen developed over the capitals in the illustration forming a headpiece to this Paper.

One building, supposed to be a monastery, has been found at Shah-Dheri, in the Peshawar Valley, with pillars,

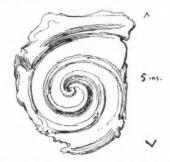


FIG. 6.—FRAGMENT OF VOLUTE, IN PLASTER. FROM HADA, NEAR JELLALABAD. (From a Sketch by the Author.)

the capitals of which appear to have been derived from the Ionic. The front view would not strike an unpractised eye as being of that Order, because, instead of the scroll, there are two circular discs—quite smooth—without volutes; but the side view shows the cushion, which connects the volute in front with the other behind, compressed in the middle, where there are two small mouldings, thus showing a form that must have been evolved in some way from the Ionic [fig. 5]. In addition to this I can state that a fragment, in plaster,

of a small volute was found at Hada, in the Jellalabad Valley, which was the only trace of this Order that chanced to be noticed. In all the topes, where any fragments of the capitals remained, they were quasi-Corinthian, but Sir Alexander Cunningham affirmed that the fragment from Hada was that of a "Roman Ionic capital" [see fig. 6].*

* All the fragments of sculpture found in the excavations I made at the Ahin Posh Tope were sent to Calcutta, and it would seem that this fragment of a voluto was among them. Sir Alexander Cunningham finding it, assumed that it was from Ahin Posh, and in the Journal of the Asiatic Society of Bengal for March, April, and August, 1879, he stated that the tope had been of the

FIG. 5.—CAPITAL AND BASE.
(From CUNNINGHAM'S Archaeological Survey, vol. v. pl. xviii.)

[&]quot;Roman Ionic Order," and that the fragment was that of a "Roman Ionic capital." This may be correct so far as the character of the Order is concerned, but the fragment had no connection with the tope. Of course, Sir Alexander was not to blame in this, because he had no means of knowing what is here stated. I found no capitals on the Ahin Posh; only the lower half of the pilasters

In Kashmir and the Salt Range—the latter is in the Punjab, north of the Jhelum, the ancient Hydaspes—there are still remaining a few temples, with columns, which have been described as Doric. If the Corinthian and Ionic had not been recognised in this region, I doubt if any one would have ventured to give the title of Doric to these remains. The classic influence being accepted, there is no reason why the Doric may not have come with the other Orders. The column and capital of this Order are the only features which have as yet been found in the very few



FIG. 7.—FORM OF DORIC COLUMN AT MARTTAND, KASHMIR.

(From a Sketch by the Author.)

examples that are known. The absence of the frieze and architrave peculiar to the Doric Order may be accounted for from the fragmentary manner in which the other Orders have been copied. I give a sketch of one of these columns [fig. 7], which forms part of the enclosure of the

were left; and in my restoration I made the capitals Corinthian, which I believe them to have been, like all the others I saw in the locality. I give this note because some one may hereafter find Sir Alexander's statement, and upon his authority—which is so deservedly high, from

his long and distinguished labours in the field of Indian archæology—accept it as a fact, especially as there is no existing evidence to bring against the statement that there had been a Buddhist tope, in the Jellalabad Valley, of the "Roman Ionic Order."—W. S.

temple of Marttand in Kashmir.* There is a temple in the Salt Range, at an ancient site called Mulot, which has similar columns in it [fig. 8].† Both of these temples are Brahminical, and from that it may be assumed that they are later than the Buddhist in which the Corinthian is found. Fergusson dates the temple of Marttand from 725 to 761 A.D. Cunningham puts it from 578 to 594 A.D. At present it matters little as to which of these dates is correct; it is enough to know that this particular Order was introduced after the others.

The sculpture which is found in connection with this architecture also bears strong evidence of a foreign influence. The formal conventionalism, which is such a marked feature of Indian sculpture, has in this case almost entirely disappeared. In figures of Buddha the rigid lines of drapery are superseded by more picturesque folds; even the round knobs by

which the hair of the head was represented by Indian artists has given place to a more naturalistic treatment. The influence on the sculpture, in fact, is quite as marked as in the architecture. Much of it is rude, and was no doubt the work of local artists of no great merit.

When this particular style of architecture and sculpture was first brought to light, it was very natural to associate it with the Greeks and Alexander's invasion. Alexander's name still remains connected with many legends in the Punjab and Afghanistan. Wherever there are groups of date trees, the Punjabis say that these places were the camps of Alexander. His soldiers, it is believed, were fed on dates, and they threw away the stones, from which the trees grew. When I visited the Manikyala Tope in 1860, it was at that time familiarly known as the "Tomb of Bucephalus"-Bu-



FIG. 8.—TEMPLE AT MULOT IN THE SALT RANGE.
(From Fergusson's Indian and Eastern Architecture, p. 296.)

cephalus being the name of Alexander's horse, which is said to have died about the time when he fought the great battle with Porus at the Jhelum, and a monument was erected to it. The historians also record that the great Macedonian built two cities, one on each side of the river; one was called Nicæa, and the other Bucephala, in honour of his favourite steed. This was the first train of thought by which the classic influence was explained; but it was soon felt to be insufficient. Alexander's stay in the Punjab was too short to have made any impression, or to have caused a permanent style of architecture to come into existence. The date

^{*} A restored drawing of the doorway with this column will be found in Fergusson's *Indian and Eastern Architecture* [Edition 1876], fig. 162, p. 288,—W. S.

[†] Ibid. fig. 169, p. 296. Also Archaelogical Survey of India, vol. v. p. 85, and pls. xxvi. xxvii. Cunningham gives the name of the place as "Mallot."—W. S.

of Alexander's invasion is also, I think, too early, it being generally accepted that the remains belong principally to the first centuries of the Christian era.*

The theory held up to the present has been that this influence originated from Bactria. where a Greek government was established on the conquests of Seleucus Nicator, with Balkh as its capital. A large and important city, which was the seat of government, would no doubt attract artists, who would remain permanently in such a place. So far we have evidence that Greek artists—or, at least, artists familiar with Greek art—did exist in Bactria, for the coins of the early rulers afford evidence of this. The coins struck by Euthydemus, Demetrius, and Eukratides may be taken as examples. The art upon these is not only after the Greek manner, but they have also Greek inscriptions and Greek deities represented upon them. The theory suggests that, if men came to that region capable of producing coins, there might also have been others who were architects or builders, as well as sculptors. This Bactrian dynasty is supposed to have continued for about a century and a half, when it was swept out of existence by a Scythian or Mongol horde, known as the Yu-chi; but a hundred and fifty years would be quite sufficient time for the introduction of new forms in architecture and sculpture, as well as for establishing them as a permanent style. Being once established, the supposition is that the style, in course of time, found its way into Afghanistan, and passed on to the Indus.†

In these views of the subject the Greek origin is assumed; but later on doubts arose, and for some time past the question has been, Is the influence Greek or Roman? Perhaps I could not do better than quote the words of Fergusson on this disputed question. He says:—
"Among Indian antiquaries there are two different views as to the age of these sculptures, "regarding either of which a great deal may be urged with a considerable degree of plausibility. "The first is, that the Bactrian Greeks carried with them into Asia the principles of Grecian "sculpture and the forms of Grecian architecture, and either during their supremacy or after "their expulsion from Bactria established a school of classical art in the Peshawer Valley. It "further assumes that when Buddhism was established there under Kanishka and his "successors, it bloomed into that rich and varied development we find exhibited in these "Gandhara monasteries. This is the view adopted by General Cunningham, who, however, "admits that, as all the sculptures are Buddhist, the earliest must be limited to the age of "Kanishka, which he assumes to be about B.C. 40, and that they extend to A.D. 100, or "thereabouts. The other theory equally admits the presence of the classical element, derived

"shortly after A.D. 100, when it was supplanted by the "Indian alphabet." [Ibid. pp. 187-88.] Fergusson is inclined to continue the style down to a much later date. He says: "The erection of the topes in Gandhara was spread pretty evenly over the whole time that elapsed from the "Christian Era till Buddhism ceased to be the religion of the country, in the 7th or 8th century; and that the "most flourishing period was about the year A.D. 400, when "Fa Hian visited the country." [Indian and Eastern Architecture, p. 181.]—W. S.

† We have authentic evidence of the celebrity in which Bactrian architecture had been held at an early period from the Chinese pilgrim, Hiuen Tsiang. When in the South of India, at a place supposed to be Amaravati, he describes a monastery as follows:—"Un ancien roi de "ce royaume l'avait construit en l'honneur du Bouddha et "y avait déployé toute la magnificence des palais de "Ta-hia [de la Bactriane]" [Vie et Voyages de Hiouen-Thisana, Julien's trans. p. 188]. The passage does not indicate in the slightest what the style was, but that the architecture of Bactria had been known as far as the South of India for its "magnificence."—W. S.

^{*} Regarding the date, Sir Alexander Cunningham says: "As to the age of these specimens of Indo-Grecian "architecture and sculpture, my belief is that the great "mass of them belong to the most flourishing period of "Indo-Scythian rule under Kanishka and his immediate "successors, or from 40 B.C. to about 100 A.D." logical Survey, vol. v. p. vi.] In the same volume he says :- "As the different styles of Greek architecture must " certainly have been introduced into the Kâbul Valley and "the districts lying along the Indus as early as B.C. 200, "it is a source of much disappointment to me that no "specimen of Indo-Grecian architecture has yet been "discovered to which I can assign an earlier date than about 80 B.c." [p. 199]. To this he adds that this style, so far as I can judge, must belong to the two flourishing centuries of Indo-Scythian rule, or from B.c. 50 to "A.D. 150" [p. 189]. Sir Alexander was guided to this conclusion partly by inscriptions and coins, for he says of the sculptures: "That they are not of later date than A.D. 150, I "infer from the use of Arian letters only as masons' marks, "as it would appear from the testimony of both coins and "inscriptions that the Arian alphabet fell into disuse

"from the previous existence of the Bactrian Greeks, but spreads the development of the classical "feeling through Buddhist art over the whole period during which it existed in the valley, or "from the first to the seventh or eighth century of our era, and ascribes its peculiar forms as "much, if not more, to constant communication with the West, from the age of Augustus "to that of Justinian, rather than to the original seed planted there by the Bactrians." *

These quotations, along with what I have given above, will make the whole question before us easily understood. It may be even simplified by putting it as follows:—Is this influence Greek or Roman? When I have written before upon this subject, I accepted, without considering the matter, that it was "Greek," and used that word along with the word "classic." In the present Paper I have adopted the term "classical" in the title, so as to avoid any assumption about its being Greek or Roman; but I may now state that the aim of this Paper will be to show that the influence was Roman, and not Greek. I shall add some slight evidence which goes to show that the first influence, which has been generally accepted, and which even Fergusson supports, as coming from the Bactrian Greeks, is very doubtful. This may be seen in details which point to Palmyra as the source through which the classic influence came to the north of India, and that, when it reached the Indus, it went from that region into Afghanistan; and probably it never crossed the Koh-i-Baba range into the valley of the Oxus.

Perhaps I could not do better than relate the occurrence of the steps which have led me to the conclusions stated above. In the winter of 1884-85, when I accompanied the Afghan Boundary Commission from Tehran, through Khorassan, to the Murghab, where I was close to what had at one time been the Bactrian region, I kept a very watchful eye open for any architectural remains along the whole of that route. A fluted column, a sculptured frieze, or a Corinthian capital would have been welcome to my sketch-book, if for no other purpose than to fill up a foreground. I only saw mounds of various sizes where cities or towns had been in former times. These mounds seemed to contain nothing but fragments of pottery—of which I often admired the beautiful tints—and at times large square bricks could be seen scattered about. My own impression was that these mounds were the remains of towns, constructed like those I saw in the present day, such as Sabzawar and Nishapur, which are nearly all built of mud or sun-dried bricks, the finer structures having been covered externally with coloured, glazed tiles. Not the slightest trace of anything classic was visible. Some caves were discovered near Penjdeh, but they were also free from the touch of anything that had a Greek or Roman origin. After I left and returned home, Major Talbot, R.E., who belonged to the Survey Department, was sent on an expedition, for surveying purposes, eastward through the Koh-i-Baba range.† While on this work he came to Bamian, so celebrated for its caves and colossal statues. He sent me a number of drawings and descriptions of these caves, as well as of others at Haibak, some of which have already been communicated to the Institute.‡ It chanced that in the expedition there was a young Brahman, named Bairav Baksh, a pupil of the Jeypore School of Art. I had seen his work, and knew that, although not familiar to the practice of our Western style of art, he could draw very accurately, from his having a correct eye and a very delicate hand. \ I mention this because much depends, in the present case, on the care and truthfulness of this artist's work. He made a sketch of the great statue at Bamian, which, I may state, on the

by Colonel Jacob, in January 1891, of some of the original drawings of the Jeypore Portfolios of Architectural Details [The R.I.B.A. Journal, Vol. VII. N.S. pp. 45, 92, 128]. Some of these were by Bairav Baksh; and those who saw these elaborate sheets will be able to judge for themselves as to the delicacy and accuracy of this artist's work.—W. S.

^{*} Indian and Eastern Architecture, p. 177.—W. S. † This is the name given to the continuation westwa

[†] This is the name given to the continuation westward of the Hindu Kush, and which forms the great northern barrier of Afghanistan.—W. S.

[†] Transactions, Vol. VII. N.S. p. 261.—W. S.

[§] Members may recall the exhibition at the Institute,



FIG. 9.—THE GREAT BUDDHIST STATUE AT BAMIAN, 178 FEET HIGH.

authority of Major Talbot, is 173 feet in height. This may be depended upon, for he used the theodolite, whilst previous visitors had only made guesses. This sketch was sent home to me, and I was astonished to find that there was no appearance of the Greek or classical influence upon it. The lines of the drapery are given in this figure with all the formal regularity we are so familiar with in the Indian statues of Buddha [fig. 9]. The second statue, which is 120 feet in height, has the same mannerism equally distinct.* I think every one will agree in recognising that the art on these two Buddhas does not belong to the same school as that we are familiar with in the sculptures in the Peshawar Valley.

Now Bamian is only about 150 miles south from the mounds that remain of ancient Balkh, the capital of the old Bactrian country; and if Balkh was the centre from which the classic influence started, and found its way to the Indus region, then Bamian is just the spot where it might have been expected to be found. On the contrary, the celebrated statues at that place seem to be entirely free from this particular influence. A few details of the caves at Bamian were sent to me, and in them nothing of the classic influence can be found. In a former Paper † I gave plans and sections of some caves at Haibak; these were made by Major Talbot. Haibak is direct north from Bamian. The details of these caves have been accepted as Sassanian,† with nothing either Greek or Roman in them. There are many caves in this particular region, and as yet very little has been done in the way of

^{*} I may mention that Mohammedan armies have often passed Bamian, and that in their hatred of idols they have been in the habit of using their artillery against the statues. This will explain their mutilated condition.—W. S.

[†] See Transactions, Vol. VII. N.S. "Origin and "Mutation in Indian and Eastern Architecture." There is a small dwarf pillar repeated under the domes of these caves, but as yet nothing can be deduced from its details. It is just possible that this may be a survival.—W. S.

exploration; so no assumption of certainty should be made. All that can be affirmed from the character of the great statues, and the caves, is that, so far as our present knowledge goes, there is none of the classical influence on the north side of the Hindu Kush or Kohi-Baba range. If further discoveries should show that this conclusion is not quite correct, then the conditions of the question will have to be reconsidered.

On realising the significance of this absence of Greek or Roman art in the region of the Oxus, it led me to pay some attention to the details of the style found in the direction of the Indus. But, before dealing with this, there is another view of the case, on which I should like to say something, as it will give a better idea of the subject, and help at the same time to clear the ground. Fergusson, as already explained, thought that this architectural style, with the classic influence in it, was practised in Gandhara as late as the seventh century, or at least during the period that Buddhist buildings were being constructed. This is highly probable; but to this he seems to add that the connection with the West, which was begun with the Greeks -as he supposed-was continued, "and must have been nourished and kept up by constant "communication between the East and the West during the period at which it was most "flourishing, which may be described as that intervening between the age of Constantine and "that of Justinian." * This forms a very important point in this subject, and one that is rather difficult—at least, so it seems to me—to form a judgment upon. My impression—but it is only an impression—differs from what is expressed in the above quotation. The difficulty is owing to the state the remains have been found in. There is no structure standing, there are only mounds, with foundations, and fragments of architecture and sculpture. Dates as yet are in most cases only guesses, so that no systematic chronology exists. When I was in the Jellalabad Valley I could perceive differences in the remains of topes that are still standing; but as to which were the older, and which the later, I could find no means of determining. I am more familiar with the remains in the Khaibar Pass and Jellalabad Valley than with those in the Peshawar Valley. Judging from those remains I have seen, I should say that a regular style had somehow come into existence, formed of some classic details, rudely rendered, which were intermixed with local forms. This composite style I have seen so often repeated, the details being in each case so little different, that I assume it was recognised and practised by all the architects or builders over a certain geographical space, and also over a considerable duration of time. The forms, I found, were as regularly followed as we would find in any of the recognised styles which are practised in the West. I cannot say there could be no continued connection with the West-most likely there was some communication-but I doubt the constant supply of nourishment which Fergusson's words imply.

Fergusson puts the matter in another way; he calls attention to the resemblance between the Gandhara sculptures and those on "sarcophagi or the ivories of the lower empire." † To this he adds: "There are many of the Gandhara bas-reliefs which, if transferred to "the Lateran Museum, and labelled as 'Early Christian,' would pass muster with ninety-"nine people out of one hundred who visit that collection." ‡ If the hundredth person could find out that they were not "Early Christian," then he would find out exactly what I am prepared to establish. In these Gandhara sculptures an arch is often found supported by columns with quasi-Corinthian capitals. Fergusson naturally refers to this as evidence of a connection with Byzantium at the period when the Byzantine style had developed its forms. This, of course, seems very plausible; but I doubt if the one person, beyond the ninety-nine, at the Lateran Museum would be able to recognise that the arch in the Gandhara sculpture is not a Byzantine one, but is derived from the circular roof of the Buddhist Chaitya Cave [fig. 10].

^{*} Indian and Eastern Architecture, p. 182 .- W. S.

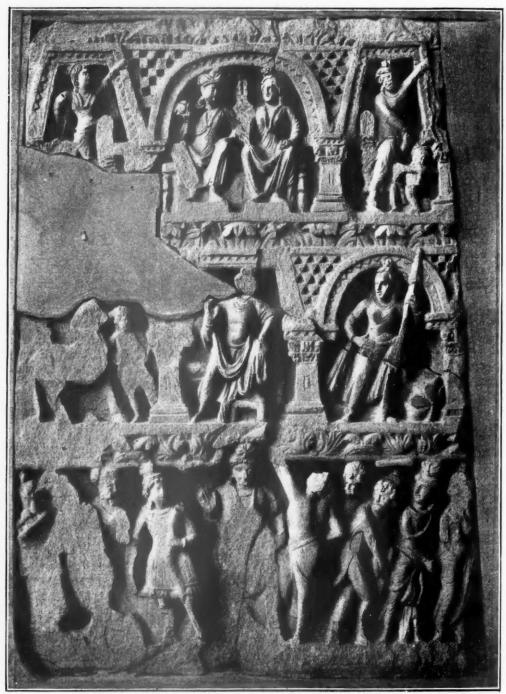


FIG. 10,-SCULPTURE FROM THE PESHAWAR VALLEY. (From a Photograph.)

There is another form which often alternates with this arch [fig. 10]. Cunningham uses the term "Egyptian niche" as descriptive of it; this is from the sloping sides; but I take it to be a wooden form of a door or window which was more or less common over the Himalayas and Tibet, and most probably it existed in the hill regions of Afghanistan.* This form is trabeate, with sloping jambs, and was originally wooden. The form itself would imply that; but I found in the Jellalabad remains a repetition of it in stone and plaster, in which the two ends of the lintel were represented projecting beyond the outside of the jambs.† This is another form that cannot possibly be traced to the West. It will be noticed in the photographs of these sculptures that the abacus, if it may be called so, is extended out far beyond the capital [fig. 10, and the headpiece, p. 93]. I take it that this is the survival of the primitive wooden bracket; as such, it was a member the native artists of the region were accustomed to, and it may be presumed that they retained it. The Persepolitan capital is another off-repeated feature of these sculptures; this is a form common to the architecture of India during most of the Buddhist period; and that is another detail that cannot be traced to Western Asia. The same may be said of the "Buddhist Railing," it being a well-known constructive form that originated in India.

These examples, I think, are sufficient for my purpose. They comprise the principal features—other than the classic—in these sculptures. The point here is that they all belong to India; not one of those given above was derived from the Lower Empire; and not one of them can be identified with what is found in Early Christian sculptures. It must be confessed that the resemblance mentioned by Fergusson does exist; but the analysis of each detail proves that, although there may be a slight appearance of similarity, there has been no connection.

The classical features of this style now remain to be dealt with. It will be seen that by taking up each point, so far as we have gone, and considering it by itself, we have been able to explain where such detail came from. Having reached this position, it occurred to me that the classical forms might be submitted to the same process, and, by doing so, equally satisfactory results might be obtained. I shall now lay before you the steps I took, and the conclusions may be left to the judgment of each individual. On the mantelpiece of my own room I have a very fine piece of sculpture which was found at Hada, near Jellalabad, and an illustration of which, taken from a photograph, appears as the headpiece to this Paper. It contains some of the main features of classic architecture; and it was this sculpture that suggested to my mind the consideration of each bit of detail, in order to test the Greek or Roman origin of it. From the illustration of this sculpture it will be seen that there are two pilasters with quasi-Corinthian capitals in it. It may also be noticed that on each of these pilasters a panel is represented. Now, this panel was the first point I took up by asking the question, "Were "there panels in Greek pilasters?" I did my best to answer this, and I could find no panels in the Greek. But, as my attention for many years back has been principally turned to Indian and Oriental architecture, I did not feel confident in my own knowledge, so I consulted Professor Hayter Lewis. He confirmed my conclusion, but added that, except as antæ, the Greeks could scarcely be said to have had pilasters in their architecture. Here were two points established, either of which would be sufficient to prove the non-Greek origin. I called his attention to the Corinthian capital on the pilaster. "Is that combination of capital and pilaster "Greek?" The answer was that the Greek anter rarely had ornate capitals. If I were asked what is the principal architectural characteristic of these sculptures, I should say it is a pilaster with a panel and a Corinthian capital; and it turns out that neither of these is Greek.

^{*} Indian and Eastern Architecture, p. 313.-W. S.

[†] Transactions, Vol. VII. N.S. p. 261.—W. S. ‡ This piece is 20 inches by 12 inches. The subject is

the Bhadrakâ Jâtaka, or that of a pious servant girl, who took out a bowl of food to Buddha. See *The Romantic Legend of Sâkya Buddha*, by Samuel Beal, p. 321.—W. S.

With a conclusion so distinct as that just arrived at, I might close the evidence; but there are two points more I should like to touch upon. These are, first, the absence of fluted columns in this Indo-Corinthian style [fig. 11], the importance of which will be seen further on. The second point is, that there were no modillions in the Greek Ionic and Corinthian, though there were sometimes dentils; and that in this Indo-Corinthian we have blocks or brackets, which I take to be modillions. If further consideration should determine that they are not modillions, then this part of the case must be dropped.

There may be other details, but I have here given enough to serve my present purpose, and they seem to me to be sufficient to show that the origin was not Greek. I may mention that I

FIG. 11.—ENGAGED COLUMN, PESHAWAR VALLEY. (From a Photograph.)

have submitted the whole case also to Dr. Alex. S. Murray, and he accepts the general conclusion that the classical details are not Greek, but Roman.

We have now to find out by what route this classical influence reached India. It has already been shown there is a strong probability that it did not come by way of Bactria. The Romans did not pass beyond Parthia; and, although greater conquerors than the Greeks, they had not their Alexander, and never invaded India. There having been no Roman invasion, there was no occupation; hence we have to seek for a trade route. There was the Egyptian route by Myos-Hormos, from which 120 ships sailed down the Red Sea every year in connection with the commerce of Rome; but these vessels seem to have gone principally to the Malabar coast and Ceylon;* so that route will not supply what is wanted, and the presumption would

naturally be in favour of the other route by the Persian Gulf, said to have been the original home of the Phœnicians, the great trading race of antiquity. But we require a much later date than the time when the Phœnicians had their original islands of Tyre and Arvad—which were no doubt great commercial centres of the ancient world—in the Persian Gulf. Possibly it might have been the descendants of these people that developed the trade with India through Palmyra. In this we have a trade route at a date near enough to our purpose; the trade lasted up to 273 A.D., when the city was taken, along with its queen, Zenobia. Here, we know, there were examples of Roman architecture; and these examples are, I think, the nearest, in point of situation to India, to any that we know of. Now, in the Roman architecture of Palmyra we find almost all the architectural features of the sculptures in the

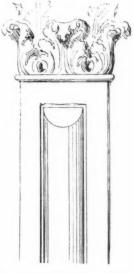
^{*} Gibbon's Decline and Fall, ch. ii., and Smith's Dictionary of Greek and Roman Geography, art. "Myos-Hormos," vol. ii. p. 387.—W. S.

Indus region and Afghanistan. The Corinthian Order predominates. The pilasters have Corinthian capitals, and these pilasters have panels. Another prominent characteristic of Palmyrene Corinthian is that of the column without flutes. The Corinthian columns of Baalbec are also without flutes. Baalbec, it may be mentioned, was also on the trade route, as well as Palmyra, between the West and India.

The panels on the pilasters of the Buddhist sculptures, it will be noticed, are not square at the top and bottom; they have a semi-circular curve, the curve being inwards upon the panel, as may be seen in the headpiece [p. 93]. Panels of this form existed in Palmyra,* but as they are only found on the soffits of the lintels, I doubt if that was likely to be the source from which they were derived. I think a more satisfactory explanation can be produced. Professor Hayter Lewis has a number of photographs of Palmyra, and among them is one of the Great Gateway. One of the pilasters of this structure has a panel, but its surface is

convex, as if a slice of a column had been inserted to form the panel; and, although the whole is rectangular, this convex form had to be sliced off at the end, the section of which produces a circular line, exactly like that in the Buddhist examples [fig. 12]. As the square form is retained in the Palmyrene pilasters, it is not quite the same as those in the Buddhist panels; but it is not difficult to imagine how the square form might be dropped out by such rude copyists, and the curved form retained. But even this supposition of a change by the Buddhist builders may not be required. Professor Hayter Lewis refers me to an example of a panel, with semi-circular ends, which he finds in the Marquis de Vogue's Syrie Centrale, said to be of the 5th century A.D. That is rather late to account for it as an original for the one in the region of the Indus; but the change may have taken place earlier in Western Asia than the date of the one mentioned, so that it may have been carried along with the other forms. Whether the mutation took place in Western Asia and was carried to India, or whether it took place in India, is not a very serious matter. It is sufficient for our purpose that we have found the probable source from which this small bit of detail originated.

I have already referred to the modillions [fig. 2]. In the Fig. 12.—PILASTER OF GREAT GATE-Buddhist structures these blocks are too large to be classed as dentils; but there is just the possibility that they may have been



WAY, PALMYRA. (Sketch from a Photograph.)

derived from local forms, to I do not wish to attach too much importance to them; but if they are accepted as modillions, then they can be accounted for as part of the Roman Corinthian as it existed at Palmyra.

In the piece of sculpture from Hada, already referred to, there is what I take to be a portion of an architrave, which is supported by the two pilasters [headpiece, p. 93]. The frieze of this is

ance of modillions. I may say that this mode of constructing lintels is a special feature of Ladak architecture, and was probably common to the Indus region and parts of Afghanistan. An outline sketch of the house at Leh, with the above details, may be seen in the Transactions for 1882–83, pl. xxxv. This plate belongs to a Paper of mine on "Architecture in the Himalayas, lished in the same volume, and at p. 75 remarks will be found on these particular details somewhat similar to those given here.-W. S.

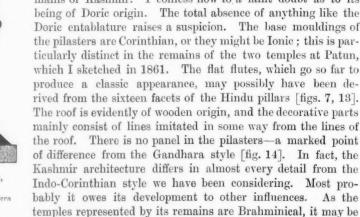
^{*} Wood's Palmyra, pl. xviii.—W. S. † I have a sketch of a house in Leh, the capital of Ladak. It was a mud house, and large pieces of wood had evidently been scarce; so a lintel was formed of small fragments. These were laid, first, across from jamb to jamb; then came a layer transversely on these; the third layer was placed like the first, and the fourth was again laid like the second. This was all very rough carpenter work, but the ends of the transverse pieces of wood, if they were small, produced dentils, and, if larger, they had the appear-

convex, and ornamented with what is intended for leaves along its whole length. Now, one of the marked features of the Palmyrene Corinthian is a convex frieze ornamented by laurel or oak-leaves. Dr. Murray, to whom I have shown the photo of this sculpture, thinks that this convex form is not a frieze, but only a round moulding. I have to confess that he is supported in this by what will be found in some of the photos of these Buddhist sculptures, in which round mouldings may be seen ornamented in the same manner. I have always looked upon this particular form as a frieze, coming as it does exactly where a frieze ought to be; but with a doubt existing about it, and coming from such a high authority, this identity of detail need not be insisted upon.

I have now gone over these details, and although they do not take in every part of the architecture, still a large portion of it is included in them. The result to my mind is that none of them belongs to Greek architecture; and that each of them-not belonging to Indian forms

-can be traced to the Roman style as it exists in the ruins of Palmyra.

I can say but little on the peculiar style found in the remains of Kashmir. I confess now to a faint doubt as to its being of Doric origin. The total absence of anything like the Doric entablature raises a suspicion. The base mouldings of the pilasters are Corinthian, or they might be Ionic; this is particularly distinct in the remains of the two temples at Patun, which I sketched in 1861. The flat flutes, which go so far to produce a classic appearance, may possibly have been derived from the sixteen facets of the Hindu pillars [figs. 7, 13]. The roof is evidently of wooden origin, and the decorative parts mainly consist of lines imitated in some way from the lines of the roof. There is no panel in the pilasters—a marked point of difference from the Gandhara style [fig. 14]. In fact, the Kashmir architecture differs in almost every detail from the Indo-Corinthian style we have been considering. Most probably it owes its development to other influences. As the



assumed to be later in date than the Buddhist. I am under the impression that the exact dates of the various temples are doubtful; but Fergusson puts the date of the Marttand temple—as already stated—as late as the eighth century, and this may be given as approximate. The examples of Ionic are so few and so fragmentary that I do not see any conclusion that can be based upon them.

Beyond the reference already made to the absence of the classic influence in the Great Statues of Bamian, I do not propose to touch upon the figure subjects of the sculptures. Neither do I propose to deal with the coins, although I recognise their great importance in reference to much that has been dealt with in this Paper. One obvious reason for silence on my part is that my want of knowledge does not entitle me to speak on this branch of the question. Those wishing to study this aspect of the case will find it treated in Mr. Vincent A. Smith's Paper, which has been already referred to. I will only recall the fact that, in my exploration of the Ahin Posh Tope, among the twenty gold coins found in the central cell, three of them were Roman. They were coins of Domitian, Trajan, and Sabina Augusta, the wife of Hadrian, who was the latest of the three; she died A.D. 137. The most probable way to account for these Roman coins in the Jellalabad Valley would be that they were carried there as the medium of commerce. This gives us the earliest possible date for the Tope; but





FIG. 13 .- PILLAR AT SRINAGAR, KASHMIR. (From FKRGUSSON'S Indian and Eastern Architecture, p. 234.)

we have to allow time for these coins to find their way to that distant part of the world, and it may have been many years afterwards when they reached Afghanistan.

There is a honeysuckle ornament on the Buddhist Lats of Allahabad and Sankissa, which is very like the Greek form of that ornament; but it is supposed that it may have come from Assyria or Persia. If it is of classic origin, then it would suggest that, in order to account for these ornaments so far south, there may have been other trade routes between Western and Eastern Asia than that which led to the Indus Valley.

When the Greek origin of the influence in the Buddhist architecture of the Indus region was assumed, it was natural that other theories should have been based upon it. One of these



FIG. 14.—THE TEMPLE OF MARTTAND, KASHMIR. (From a Photograph.)

which has received acceptance among many Indian archæologists may be alluded to here, because it is one that has an important bearing on the origin of Indian architectural art. The oldest stone structures in India date from about 250 B.C.; and along with these stone structures we have the earliest known examples of sculpture and decorative art. When it was taken for granted that the architecture and sculpture of the Indus Valley and surrounding localities were Greek in character, and had been introduced by Alexander or his successors, the use of stone as a building material, and the beginning of sculpture, through the whole of India was ascribed to this foreign influence. I never accepted this conclusion.

Even assuming that Greek architects and artists had reached Bactria shortly after the time of Alexander, I could not suppose it possible for the art they brought with them to have been carried through Afghanistan, the Punjab, and the North-West Provinces, as far south as Buddha Gaya, or to Bharhut, in Central India, in half a century or so. Styles of art did not travel with such rapidity as that at any time in that part of the world. However, speculations on this head need not be carried farther. If the conclusion pointed to in this Paper should find acceptance, the whole theory falls to the ground.

I cannot close this Paper without recording my thanks to Professor Hayter Lewis and

Dr. Alex. S. Murray for their kind assistance. - William Simpson.

DISCUSSION OF MR. SIMPSON'S PAPER.

Dr. Burgess, C.I.E. $[H.\ A.]$, formerly Director-General of the Archæological Survey of India, has

forwarded the following :-

Mr. Simpson's Paper is an eminently clear statement of the question of classical influence on the architecture of the North-West of India and Afghanistan, a question on which the last word has, perhaps, not yet been spoken. The history of our knowledge of the subject, as traced by Mr. Simpson, shows that a steady advance has hitherto been made towards clearer light. Whether the influence traceable in the remains under consideration is to be strictly called Greek or Roman is a matter of subordinate importance, dependent chiefly on the source to which we directly trace the influence and the period at which it was felt. Roman is here only a later form of Greek art. In the first formation of hypotheses, we are apt to assume more than is necessary; and in this case the theory—that if Greek die sinkers found their way to Bactria "there might also have been " others who were architects or builders as well " as sculptors "-is uncalled for. In those early times, and indeed for long after, the artist was sculptor, painter, engraver, and architect in one. The artists who prepared the long series of coins from Andragoras and Diodotos for nearly two centuries to Hermanus and Azes-and others with Greek legends for a century later-may often have been sculptors rather than engravers, and fitted to influence also the architecture of their times. Nor need we suppose that because no remains have yet been reported from beyond Bamian, and about Balkh, of similar type to those of Gandhara, therefore none ever existed; the argument from absence of evidence is a dangerous one in such a case. Remains of the sort are usually found in certain limited areas -not at all equably distributed. Nor should we make it a part of any hypothesis that Balkh only was the capital or mint city of most of these princes. Some, if not many, of them ruled over Kabul, and probably over Gandhara itself and part of the Punjab. Under these princes there seems no sufficient argument for concluding that their artists did not influence the art of the region over which they ruled. Whether that

influence had been fully developed long before the execution of the special groups of monuments under consideration, or whether it took hold on the art just about the time of their construction, may not be quite clear yet. From what Mr. Simpson justly describes as "the strange jumble" of architectural forms in these remains, it is evident that no conscious effort was made to mould the forms after classical patterns. We find Persian, Hindu, and classical details all mixed up, as if (assuming the style had not previously been formed) we might imagine the directing workman had taken hints from his travelled acquaintances: here a capital from Persepolis, there a base from Western India, and from a Yovana artist a spirited sketch of the acanthus foliage on the Corinthian capital and of decorative dentils and mutules, all which he had utilised in his own way. To break the plain surface of a pilaster a small panel was inserted, or, as often, human figures in rilievo were carved on it. In one of the Jamalgarhi sculptures (Report on Amaravati Stûpa, &c., p. 80) we have Persepolitan capitals on shafts with the true Hindu water-pot base, as if copied from Nasik or Karle, and supporting two arched passages, the roofs of which are panelled in a way that deserves attention as a feature of classical origin. A frieze of the "Buddhist rail-pattern" type rests on the extended abaci of two of the pillars, and above all is the garlanded torus The sculptures on this slab are moulding. strongly marked by classic freedom and indicate classic influences. Mr. Simpson's illustrations, figs. 1 and 5, are of much interest, as showing that other Orders than the Corinthian were known in the North-West, and that a base copied from the Attic model was employed. The base of the column in fig. 11, too, as in many other of the Gandhara sculptures, is classical, rather than Indian. In India proper, pillars either had no bases, or one of the form of a water-jar, as at Kanheri, Karle, and Nasik-of the second century; and when it was tried to improve on this, as in the striking examples at Junagadh (Rep. Arch. Surv. West. India, vol. ii. pl. xxiv.), we feel that it is only hidden by ornament akin to the Corinthian capitals of the north. Among other Gandhara sculptures we have distinct imitations of favourite Greek subjects, as, for example, in one from Sangas, which reproduces, with but little variation, Leochares's Rape of Ganymede, and the Pallas Athene in Lahore Museum. In the important Paper alluded to by Mr. Simpson, Mr. Vincent Smith comes to very similar conclusions as to the resemblance of the architectural details of the Gandhara remains to those found at Palmyra, the great entrepôt of the Oriental trade in the second and third centuries. But he contends that these Gandhara works were executed almost exclusively between 200 and 350 a.d.*—J. Burgess.

Professor T. Hayter Lewis, F.S.A. [F.], sends

the following: -

Mr. Simpson has been kind enough to show to me the sculptured tablet from Hada [see p. 93]. From the locality in which it was found it would naturally occur to an architect, as he suggests, that its style was probably derived from some reminiscence of the art of Greece, imported by Alexander in his invasion of India. But a close examination shows, I venture to think, that, by whatever channel its influence might have flowed, its source was not Greek, but Roman. The main features of the design are two wide pilasters (one at each end) with a cornice or entablature, broken in by the straight-sided arch, but otherwise surrounding the whole. The lower part is an architrave, over which is a swelled frieze, ornamented with leaves in the well-known Roman style. The pilasters have capitals in rude imitation of Corinthian. There are, no doubt, instances in Greek art wherein the ordinary mouldings of the antæ are replaced or supplemented by work of a more ornate character, as, e.g., at Priene and at the Temple of Miletus; but I know of nothing in Greek art so entirely like the Roman as the pilaster capitals from Hada. In turning to the source whence these features could have been derived, one is directed, naturally, to Palmyra, which was so nearly rebuilt by Hadrian that it received the name of Hadrianopolis, and its ruins contain some of the grandest columnar remains existing. The city was on one of the great trade routes to India, and no architect or sculptor passing through it could fail to be impressed with their magnificence. In these remains we find the swelled frieze, the leaf ornament, the wide panelled pilasters and Corinthian capitals. In the centre of the Hada Tablet we have, it appears to me, the Indian rendering of the Roman arch—the arch which never sleeps.—T. HAYTER LEWIS.

Mr. PURDON CLARKE, C.I.E. [H.A.], said that, in the years 1870 and 1871, he was stationed in Rome, engaged in the superintendence of the

copying of the early Mosaic decorations, and working in conjunction with M. Georges Berger, who was similarly employed upon the frescoes and other branches of Early Christian art in the Catacombs. During that time, although he did not seriously study as a student, he formed a good mental impression of the leading characteristics of Roman art, especially of the period of its decadence. Ten years later, when visiting India, he was shown by Mr. Kipling the collection of sculptures from Takht-i-Bahi, his first impression being a feeling of their great similarity to Roman work, and this had lasted ever since. Having been favoured with a proof of Mr. Simpson's Paper a few days back, he was reminded that through the kindness of Mr. Kipling they possessed at the South Kensington Museum a few originals and a good set of casts of the principal sculptures from Takht-i-Bahi; and a selection of those, which had been lent to illustrate the lecture, would considerably help to prove many of the points of argument in Mr. Simpson's valuable Paper. There was one labelled the statue of Minerva, and which he had little doubt was intended for Minerva-it looked very much like a work of late Roman art—and there were two or three casts which were distinctly like Roman sculptures, especially that in which a large figure was in the costume of a Roman soldier of the third or fourth century. He (the speaker) had not seen any of the buildings, excepting those in Kashmir, which were pretty well known; though in an island in the Lake at Srinagar there were foundations of a building with some very classical details which, so far as he was aware, had never been drawn. One point that seemed to have escaped Mr. Simpson's notice was that, in following the old trade route through Palmyra on to India, one could find in Persia, almost half way between Palmyra and the Indus, not far from Hamadan, the city where Queen Esther lived and was buried, the remains of an old temple still standing, which was dedicated to Diana, and the modern name was Kingavar. Some drawings of it might be in Flandin and Coste's work. The building had never been well explored, although a plan had been restored, showing that it was similar in size to the Temple of the Sun at Palmyra. He did not think any of the columns carried their capitals, which had been destroyed by fire, and huts had been built round them; but in several places, through the buildings, portions of the sub-structure could be traced, and there was no doubt of it being a perfectly formed temple of the first class. That was an important link, being on the route between Palmyra and India, and one that might be of assistance in working out the problem. It was a classical temple, according to Flandin, mentioned by a Greek geographer [Voyage en Perse, vol. i. pp. 409-12. 8o. Paris 1851]. There were quan-

^{*} Recent conclusions as to the chronology of the Indo-Scythian period have upset the dates assumed by Sir A. Cunningham, and remove Kanishka from about 40 B.C. to 80-100 A.D. This change approximates his dates to those of Fergusson.—J. B.

tities of coins, Parthian, Roman, and Greek, found in that neighbourhood, though a great many were said to be forged. In connection with the Takhti-Bahi sculpture, he would call attention to the most curious of the examples, one which Cunningham had specially noted as strongly resembling a well-known type of the figure of Hermes, who was sometimes shown carrying a goat, a rain, or a bull. In the Takht-i-Bahi sculpture it was very like the figure that was found at San Clemente, in Rome, of St. Peter as the Good Shepherd, or some of the later figures of Christ, the Good Shepherd. It was exceedingly striking; and, amongst all the others, stood away from the rest of the group as being a Roman figure.

MR. H. LEONARD [H.4.] said that when he was at Lahore it was looked upon as quite an established thing that the sculptures and remains brought into the Museum there, and referred to by Mr. Simpson, were influenced by Greek art. In Kashmir the same idea prevailed, although he thought the Kashmir buildings were much more Roman than Greek in style. It was natural enough to suppose that along the route Alexander travelled over to India, which involved a long period of time, the influence caused by his passage would, if it lasted, be Greek.

Mr. TAVENOR PERRY [A.] suggested that, to carry out the theory that the farther East they went the richer they found the so-called Corinthian style—and the farthest East they went, he thought, was Palmyra—was it not possible that Eastern influence had acted upon Western art, rather than Western influence upon Eastern art?

Mr. LOFTUS BROCK, F.S.A. [F.], said that his impression was that the buildings of Palmyra did not all date from the time of Hadrian; but that the bulk of them were much later. It existed not only in the time of Hadrian and long afterwards, but for centuries before that; so that whatever influence there might have been in Roman times was but the counterpart of what had preceded in the long period anterior, when the Greek influence would be found rather than the Roman. From the fact that so many coins had been found in India indicating Greek influence, it really seemed no more difficult to believe Greek artists were at work designing and executing buildings than that they executed coins.

buildings than that they executed coins.

MR. WILLIAM WHITE, F.S.A. [F.], said that there must have been a Greek influence, and possibly a subsequent one from the Roman, meeting it perhaps some centuries later. In the photograph handed round [see the headpiece p. 93] there was a conglomeration of various styles, Greek, Roman, Byzantine, and Gothic, all combined together in one.

Mr. PHENÉ SPIERS, F.S.A. [F.], referring to Mr. Simpson's statement that it was doubtful if any other known style of architecture could be brought forward carrying with it so many aliases, said

that he hoped to be able to prove that there were many more even than Mr. Simpson had been able to distinguish, and that Sassanian and Byzantine would have to be added. The object of the Paper was to prove that the theory which attempted to ascribe those works to Greek architects was erroneous, for the reason that they contained many features of undoubted Roman origin. In his research for the route by which the classical influence entered Bactria, Mr. Simpson had fixed upon the trade route through Palmyra, and this trade dated up to 273 A.D., when the city was taken. It was therefore prior to that date that Mr. Simpson had fixed the period of those Buddhist sculptures. From a careful examination of photographs, and research into the developments of the Sassanian and Byzantine styles of architecture, he (Mr. Spiers) had come to the conclusion that the Buddhist sculptures had infinitely more connection with those two later styles, and that in their character they differed widely from the Roman work at Palmyra. Fergusson, in his Indian and Eastern Architecture, had pointed out the wide difference between the Corinthian capitals of Palmyra (which differed but little from those of the Pantheon at Rome) and the capitals from the Gandhara monasteries, which in their design resembled more those from the church of St. Demetrius at Thessalonica, and many churches in Central Syria. He (Mr. Spiers) could not accept Mr. Simpson's theories as regarded the date of the Bactrian work, seeing that it possessed features which could only be ascribed to a date as late as the fifth and seventh centuries, or even later. The principal features shown in the illustration fig. 10 were the arches alternating with a threesided figure with sloping sides, both of them carried on stumpy Corinthian pilasters. Simpson had pointed out that the arch, as shown, need not have had a Byzantine origin, because it was like the Chaitya arch of a Buddhist cave. It was not the arch alone, however, which decided the question; it was the close assemblage of arches, and their support on Corinthian pilasters with wide spreading capitals, which denoted, he ventured to think, their Byzantine origin. Arches carried on columns were not found in Palmyra, in the buildings in which Mr. Simpson took for his models, but they were adopted as the principal characteristics of the style in Byzantine buildings in the East and in Eastern Europe. The capitals of the pilasters were of two designs, which might be either Persian or Byzantine. Describing in detail, from a photograph, the various features of a bas-relief tending to prove his argument, Mr. Spiers went on to say that the two decorative details on which he chiefly relied as showing the later date of the work were one of them Sassanian, the other Byzantine. The Sassanian detail was the dent-de-scie moulding which decorated the arches, and at that epoch the

only Eastern race which adopted such decoration was the Sassanian, as in the Palace of Rabbath-Ammon, in Moab. The Byzantine detail was that shown in the string-courses, which was a leaf decoration of the ogee moulding, found first in its strongly developed form at St. Sophia, Constanti-

THE HON. SECRETARY wished to second the vote of thanks to Mr. Simpson for his interesting Paper, and urged that the author's endeavour to prove that the Greek influence from Bactria could not have penetrated down into the Punjab and Central India,—on which he based his argument that Greek influence could have had nothing to do with the architecture of that country,—was met by the well-founded belief that Alexander crossed the Indus itself at a place called Attock, where there was, till recently, a bridge of boats, not very far from which some engineers, in making a railway, discovered an ancient Greek burial-ground. A note of the discovery was sent to the Director-General of the Archæological Survey of India, and it appeared, or was expected to appear, in one of the official reports. He (the speaker) had seen in the Lahore Museum, which was under Mr. Kipling's care, some of the sculptures to which reference had been made, and there was one -a large representation of Buddha-which gave him at the time a very strong impression of Greek character, certainly more Greek than Roman; and he thought the sculptures in some cases did show more Greek than Roman influence with regard to the folds in the drapery. They were taking a great deal of trouble to prove how far that influence of Greece and Rome had affected architecture in that part of India; but most things in the West had proceeded from the East. The East was the cradle of the religious beliefs and of the arts; it was also the cradle of the human race according to Scripture. Was it not likely that some of those artistic types which they were trying to prove had been introduced from Greece originated in those localities and started westward, and that they were perfected by the Greeks and Romans, and perhaps later went back again? All over India instances of what they were pleased to term classical detail were found. In ancient Indian architecture there were numberless little details closely similar to some details in Greek and Roman work, and might it not have been that the germ of these types really came from the East? With regard to the point mentioned, that certain of those sculptures looked very like early Christian work, the Nestorians, it was well known, penetrated into both India and China; and China at the present moment contained remains of certain buildings which were known to have been Nestorian. Was it not possible, therefore, that they might have taken some suggestions of early Western art into India at that time?



CHRONICLE.

EXAMINATION FOR CANDIDATURE AS ASSOCIATE R.I.B.A.

The President announced to the General Meeting of the 18th inst. that 70 persons, of whom 22 were relegated from previous occasions, had applied for admission to the Examination qualifying for candidature as Associate, and that 59 had been admitted. Two of these did not attend, 51 were examined in London, and 27 passed; six were examined in Manchester, and four passed. Of the 24 in London who were unsuccessful, six were relegated in all subjects of the examination, and 18 in certain subjects; of the remaining two in Manchester, one was relegated in all subjects, the other in certain subjects. The names and addresses of the 31 successful candidates, given in alphabetical order, were then read by the President as follows :-

ASHFORD: William Henry: Stone House, Rhayader. BACON: Roger Francis; Swallowfield Vicarage, Reading [Probationer 1889; Student 1891].

BARLOW: William Tillott; 23, Finsbury Circus, E.C.
BARNES: Harry; 25, Fawcett Street, Sunderland [Probationer 1891].

BARROW: Ernest Robert; 76, Mount Street, W. BROWN: Alfred Kirk; Preston Cottage, Preston, Hull. CHILDS: William John; 7, Cedars Villas, Putney Bridge Road, S.W.

DEARDEN: Henry; Healey Lane, Batley, Yorkshire. EARNSHAW; John Robert; 4, Chapel Walks, Manchester. FETCH: Ernest Edward; 54, Goodrich Road, East Dulwich, S.E.

FORGE: Arthur James; Oakleigh, Claremont Grove, Woodford, Essex.

HALSALL: Francis Peter; 8, Bridge Street, Southport. HAYWOOD: Charles Spencer; Commercial Chambers, Accrington.

JONES: Harry Evan; The Tower, Dalston, N.E. KEMPSON: Charles; 96, South Fields, Leicester.

KENDALL: Franklin Kaye; 1, The Paragon, Blackheath [Probationer 1890; Student 1892].

LANDER: Harold Clapham; Rockhurst, Tunbridge Wells [Probationer 1890; Student 1892]. LEWIS: William Arthur; Brooks Croft, Forest Road, Walthamstow.

LISHMAN: Frank; 51, Grandison Road, Clapham Common, S.W.

LITTLE: John Renison; Eden Holme, Chorley New Road, Bolton. LUCAS: John Archibald; Guildhall Chambers, High

Street, Exeter.

MORGAN: Arthur Hill; 80, Foregate Street, Chester. MOWLEM: John Ernest; 13, Osnaburgh Street, N.W. NEWNHAM: John; 61, Palace Gardens Terrace, W. NIELD: George Ernest; The Sycamores, High Road, Tottenham.

SALIER: Douglas George; 11, Spring Gardens, S.W. SHEPPARD: Arthur William; 45, Brailsford Road, Tulse Hill, S.W.

SMITH: David Forbes; Forth Bank, Gallatown, Kirkealdy. TOYNTON: Alfred Wright; 23, Duke Street Chambers, Bloomsbury, W.C. TREW: George Harry Male; 53, Beauchamp Road,

Lavender Hill, S.W.
WETENHALL: Edward Box; The Poplars, Finsbury
Park, N.

The Ashpitel Prize, 1893.

The announcement, also made by the President on the 18th inst., that the Council had awarded the Ashpitel Prize for the current year to Mr. Barrow, of London, and two subsidiary prizes to Mr. E. E. Fetch, of Cambridge, and Mr. Inglis, of Edinburgh, may be here conveniently supplemented by the statement that Mr. Barrow has been thus placed at the head of 141 other gentlemen who, in the Spring and Autumn Examinations of 1893, sought to qualify for candidature as Associate, and of whom 73 (out of 142) qualified. The Ashpitel Prize, which this year consists of books to the value of ten guineas, is provided out of a special fund, held in trust as a memorial of the late Arthur Ashpitel; and the subsidiary prizes of five guineas each, above mentioned, are provided from the same fund.

Mr. Simpson's Paper.

The Hon. Secretary, last Monday, was enabled to promise on behalf of Mr. J. Lockwood Kipling, formerly of the Lahore Museum, who was present at the Meeting, that the latter would make a communication to the Institute on the subject of Mr. Simpson's Paper; and he also expressed the regrets of Sir Richard Temple and Sir George Birdwood at their inability to accept the invitations sent them, one on account of his Parliamentary duties, and the other from indisposition. Mr. Ney Elias, the well-known Eastern traveller, and Political Agent of the Viceroy at Meshed in Persia, and Mr. Stephen Wheeler, formerly of Allahabad and Lahore, were present, though they did not join in the discussion. Communications made by Dr. Burgess and Professor Hayter Lewis, which were read to the Meeting, will be found on a previous page. A letter addressed to the President by Mr. Simpson, explaining his enforced absence, and expressing his regrets, was also read.

The late William Charles Tuke and James Maxwell.

At the General Meeting of 17th April last was announced the decease, on the 28th of the previous month, of William Charles Tuke, junior partner in the firm of Maxwell & Tuke, of Manchester and Bury. It is with deep regret the Institute now

chronicles the death, which occurred on the 28th September last, of James Maxwell, the head of the firm, who survived his partner but six months, the two gentlemen having been associated together for a period of over twenty-six years. Both had been Fellows of the Institute since 1888, and both were prominent members of the Manchester Society of Architects, Maxwell being also a Fellow of the Surveyors' Institution. Maxwell was articled to the late Thomas Holmes, of Bury. At the age of twenty-one he set up in practice on his own account, and in a few years laid the foundation of a very extensive business. In 1865, Tuke, the son of an architect and surveyor of York, and great-grandson of a surveyor of note of that city by whom the first survey of Yorkshire was made, entered the office of James Maxwell as clerk, and two years later was admitted into partnership with him. The firm thus constituted carried out a large number of public and private buildings in all parts of the country, including the Cambridge Hall and the Winter Gardens at Southport, the Manchester Jubilee Buildings, the Ulster Reform Club at Belfast, the British Section at the Brussels Exhibition, the Eiffel Tower and surrounding buildings at Blackpool, some ten or twelve banks in various parts of Lancashire, and the Technical Schools and two Club-houses at Bury. Their most important work, however, was the part they took in the foundation of St. Anne's-on-the-Sea. The whole of the town was laid out by them, the Promenade constructed, roads made, and plans prepared for the hotel, gasworks, and practically for all the original houses in the neighbourhood. The firm also prepared designs for public buildings which have been erected in Yokohama and Ecuador; and they were among the six selected architects in the latest competition for a War Office.

REVIEWS OF NEW BOOKS. IV.

(9.)

THE SPANISH RENAISSANCE.

Renaissance Architecture and Ornament in Spain: a Scries of Examples selected from the purest works executed between the years 1500-1560, measured and drawn, together with short descriptive text, by Andrew N. Prentice. Fo. Lond. 1893. Price 50s. [Mr. B. T. Batsford, 94, High Holborn.]

This series of remarkable drawings refers to a period of art which it behoves Englishmen to study with greater care than they have hitherto done, for Spain reaped the benefit of researches when that country was, by the discovery of the New World, in a position to undertake the production of costly works of art.

Let us recall, by the aid of Addington Symonds, the historian of the Renaissance, what was happening in Europe about the year 1500. Spain, France,

and Germany had gained entrance to Italy-that Italy which in later years of the fourteenth century had begun to thirst for a knowledge of classic culture, and owing to the fall of Constantinople in the middle of the fifteenth had found from the dispersed volumes of the classics, hitherto shut up in the libraries of that capital, an altogether new field of mental culture. It was not from rediscovered antique art that as yet the artists and the architects and the sculptors received their inspiration, for little of antique art had been unearthed during the fourteenth and fifteenth centuries; but classic literature lighted a flame which found expression later in works that have claimed during the last 400 years the admiration of the world. This was the period which tuned the writings of Alberti, and paved the way for the purest and most perfect specimen of what is known as Italian Renaissance architecture. Bramante's work was not so much an outcome of studies in antiquity, as an exhibition of emancipated modern genius, fired and illuminated by such masterpieces of the past as came before him, interpreted by the newly discovered literature of the same period. This, then, was the artistic atmosphere into which the Spaniards emerged at the time when Charles VIII. of France, by his expedition to Naples, opened Italy to the leading nations of Europe.

The universities of Italy at this time attracted the youth of all these nations; they returned later enthusiastic pioneers in an altogether fresh interpretation of art to their own countries. In Spain the union of the Crowns of Castile and Aragon had generated a united nation; and the expulsion of the Moors, that strangely cultured and artistic people, had set free an amalgamated race of artist workmen, able in an altogether fresh direction to carry out the ideas brought into the service of the peninsula by the Italian artists who flocked thither at a time when Christian churches had to be not only erected but furnished; and on this latter portion of the work they specially expended the artistic knowledge of their day, at a time when ample pecuniary means were forthcoming to carry out the wishes of an enthusiastic

and a highly cultured ruling class.

Fergusson tells us that we possess but few books on Art in Spain. He says we have books in abundance on the glories of the Alhambra and Moorish art generally—but for the Renaissance we are left to the prosy twaddle of Ponz, or the dry text of Cean-Bermudez, which, though eminently useful to those who have the buildings before their eyes, is worthless, from its deficiency in illustrations, for the purpose of stay-at-home explorers. He adds that, in so far as the Renaissance is concerned, the first burst of it alone is worthy of much attention.

This is the style which, derived from Italy, fostered by those whose education had been acquired in the same country, and carried out in Spain in many cases by Italian artists in conjunction with Spanish workmen brought up under the cultured influence of the Moors, displayed itself during that period of exultation and of pride which followed the union of all Spain under the glorious tutelage of Ferdinand and Isabella. It continued to flourish till the year 1558, a period during which Spain, from her discovery of the New World, and the position of her monarchs as the greatest sovereigns of Europe, combined with the energy of the great men who then illustrated her councils, stood forward practically as the feading nation of Europe.

As ill luck will have it, a nickname has been given to this style of Spanish architectural art; for some unknown reason it is called "Plater-"esque." This name has had some influence in preventing some of the finest work in Europe being studied as it deserves; it seemed to convey the notion that the details were only appropriate to the workshop of the silversmith, and so it has come to pass that few have noticed them; and Spain till recent times has been quite beyond the means of the ordinary architectural student as a

happy hunting ground for his efforts.

Thanks to the Royal Institute of British Architects, Mr. Andrew N. Prentice, a Soane Medallist of the Institute, the author of the volume now noticed, was able to pass some time in the peninsula, and he deserves the greatest credit for having made such good use of his time; he has not only made a most interesting selection of subjects, but has executed the drawings with considerable skill. Who knows but that drawings which recall such a glorious period of art as this,-if others also will take part in the work,-may be the means of a renascence, in the twentieth century, of some of these art methods of the sixteenth? In Spain this style flourished only for about half a century, but it was the means of attracting to that country those who executed some of the choicest specimens of a school of art that has no rival in modern times.

Of course, the revival among us of anything of such a high class as this presupposes an amount of culture among persons for whom the work is done which it would be difficult to assign to those who in the present day furnish the means without which it would be impossible to execute it; the workman, too, must have artistic knowledge of a deeper character than that with which we are accustomed to credit him at the present time; still, demand generally produces supply, and the Art institutions of the last thirty years must have failed in their purpose if they cannot bring to the front a few, at any rate, whose art knowledge might find expression when an opportunity such as this is presented for their acceptance. We must, however, remember that no "cheap-"jack" execution can exist in the style we are considering; and, alas! in these days the craze for

cheapness, which is already deteriorating our manufactures, would altogether destroy all chance of a successful reproduction of early Renaissance art. Mr. Prentice's drawings are of course in black and white, and indicate rather than reproduce the effect of the art decoration which clothes the

architectural designs of this period.

Should any one desire to realise fully the art surroundings of this early time in Spain, there is a unique opportunity of doing so owing to a munificent gift made some months ago to the British Museum by the late John Malcolm, of Poltalloch. If the book is not on view yet, its production cannot be long delayed. It consists of a livre d'heures, the property of more than one member of the Royal Family of Spain; about half of it is ornamented in the medieval style, while the remainder consists of the most exquisitely finished drawings in colour and gold that perhaps ever were produced in this highly favoured period of art. A series of architectural subjects of the greatest interest will be found decorating the pages of this choice volume; both styles of art represented being of the highest kind, an intellectual treat is in store for those who care not only for the usual style of manuscript illumination, but who value the rare opportunity of seeing, as if executed yesterday, the coloured architectural details of this early renaissance time. The book on its arrival in this country from Spain (which it left for the first time only a few years ago) was in one volume. It has, however, been since divided, perhaps out of respect for the different styles of art depicted within its covers. At any rate, during a consideration of this period of art it seems cognate to the subject to mention such a priceless specimen as this, which ought to interest members of the Institute, even if others pass it by. The Italian influence shown in the splendid miniatures enshrined in the volume bear witness to the cultured taste of its possessors; that many of the illuminations were executed in Italy there can be little doubt, but others of them, there is no kind of question, were produced in Spain at the very time when the works delineated by Mr. Prentice were being executed, if not by Italian workmen, at any rate by artists instructed by them; and attention is now called to this volume because by it, together with two others also in the British Museum-namely, The Breviary of Isabella the Catholic, dated 1496, and the Book of Hours belonging to her daughter-some idea may be formed of the cultured surroundings of those who brought about the remarkable phase of art to which these interesting drawings of Mr. Prentice have introduced us.

Speaking of the Renaissance in Spain, Addington Symonds, whose knowledge of the subject is, apart from the historical prejudices of that writer, universally acknowledged, calls particular attention to the fact that this period in Spain produced no

slavish imitation, as it did later in Italy; whilst the note of Renaissance work in Germany was still Gothic, he adds, "touched by Italian in-" fluence, enriched and fortified by the new learn-"ing, Spanish genius walked firmly forward on

" its own path.

It is indeed satisfactory that such good use has been made of the means provided by the Institute to enable young students to travel in countries which to former generations were inaccessible. The writer of the present notice was a witness to the diligence shown by Mr. Prentice and his companion Mr. Heber Rimmer, both Soane Medallists, when they were at work in Majorca, a place somewhat beyond the purview of the ordinary tourist. In consequence of this by-journey we find among the drawings in Mr. Prentice's volume several from Palma Cathedral fittings, notably the pulpits or ambons and bas-reliefs in the choir of that interesting church, which show how, even in a comparatively out-of-the-way island, the Italian influence of this great period of art made itself We know all about this noble work-how that one Juan de Sagrera, between the years 1525 and 1580, contracted for and executed what we now see; and that even if he had studied in Italy he was assisted by a local artist—one Maximari, or Maximo Marino. Thus, from an instance such as this, we may fairly assume that natives on the mainland of Spain were gradually obtaining knowledge of Italian Renaissance methods of the finest time, and turning them to account in the manner we now have an opportunity of appreciating in the volume before us. Surely if we admire but at a distance we shall be none the worse for a careful study of the early Renaissance period of art in Spain, to which this volume of drawings is a means of introducing us.— Lenox Prendergast.

It has often been a source of reproach that so few architectural works with fine illustrations should be published in England, whereas on the Continent, and particularly in France, a year never passes without two or three sumptuous volumes appearing, either on architecture or on the kindred arts attached thereto. The reason perhaps is not far to seek. Many of the works referred to are published at the expense of the French Government; but even when they are undertaken by private enterprise the State deems it to be a part of its duty to encourage the venture by subscribing for fifty or a hundred copies at the published price, and distributing them among the libraries of the various provincial towns. Here in England the unfortunate publisher is required by law to present five copies to the British Museum and other libraries respectively. This being the case, it is at least some consolation to be able to feel, when such a work as Mr. Prentice's volume on Spain appears, that for the immediate purposes of the publication—namely, its real use in an archi-

tect's library-and for its inherent artistic value. it not only holds its own, but is far superior to French works of a similar though much more expensive kind. As an instance of this, while Mr. Prentice's labours during the last three years have been devoted to the delineation of the Plateresque work in Spain, M. Léon Palustre, a wellknown French writer, has been occupied with the production of a magnificent work entitled La Renaissance en France, representing the architecture of a similar period in that country, and of which at present three volumes have been published, illustrated with magnificent eaux fortes by M. Sadoux and other well-known etchers. It is true that the scheme of M. Palustre's work goes beyond that attempted by Mr. Prentice, and is the result of many years' labour and research into the history of the François-Premier style and its development by French artists, in opposition to the now exploded theory that its chief beauties were due to the importation of Italian architects. Looking, however, to the illustrations alone in the two works, and notwithstanding the great beauty of the plates in M. Palustre's volumes, as representations of architectural detail they are far inferior to Mr. Prentice's; and we have the additional satisfaction of feeling that in the latter's work, drawn on the spot, and by an artist whose sympathies were completely in harmony with the spirit of the detail he was drawing, we possess a far more perfect representation than that afforded by the brilliant etchings of the French artists.

One general consideration which suggests itself in looking through Mr. Prentice's work is the variety of drawing it contains, and for this reason alone it is of great suggestive value to students. The drawings were either in pencil, inked in, or tinted, and they represent general views in perspective, plans, general elevations, detail elevations, with sections where required, profiles of mouldings, details of woodwork, ironwork, plaster and wood ceilings, and sketches of various features in perspective. For the reasons suggested in the preface to the work, the greater part of the illustrations are from buildings hitherto unknown, and it is perhaps difficult to select examples as the more worthy of notice. Two of the classes of subject, however, from their beauty and, to a certain extent, variety of treatment when compared with the work of other countries are, first, the magnificent grilles which form the screens to the choirs, chapels, and tombs of the Spanish churches. These have been already referred to in the Paper on "Wrought-Ironwork: Renaissance Period," read last year by Mr. Starkie Gardner,* though he was in possession only of a few of the numerous examples given in Mr. Prentice's work.

The second class of subject to which we might refer, and which, though found in Italy, is developed

to a far greater extent in Spain, is shown in the small court or patio, which forms the most important feature of a nobleman's house in Spain. The variety in the designs of these courts as displayed by Mr. Prentice is endless, and they possess one characteristic essentially Spanish-namely, the bracketed capital which enabled the architect to employ the horizontal entablature instead of the arch as in Italy, and therefore to economise in the height of the storeys. The suggestion of clear, sharp shadows given either by tint or hatching in Mr. Prentice's drawings is, for a work of this kind, preferable to that afforded in French illustrations, where most of the detail is lost in the intensity of actual shade; and he has done wisely to commence his work with the drawing of the Library of Santiago Cathedral, which prepares the student for an appreciation of the extraordinary brilliance of the sunlight in Spain, which gives such value to the contrast between the large masses of plain masonry and the exquisite and rich detail of the window and door dressings. The reticence in some of the drawings is to be commended, as, for instance, in Plate 20, where it has not been deemed necessary to repeat the ornament on both sides of the doorway; and for excellence of draughtsmanship the figures in Plate 10, the doorway at Burgos, and in Plate 18 the marvellous iron pulpit in the Cathedral of Avila, should be specially noted.—R. Phené Spiers.

(10.) CONCRETE.

Concrete: its Nature and Uses. A Book for Architects, Builders, Contractors, and Clerks of Works. By George L. Sutcliffe, A.R.I.B.A. With illustrations. 80. Lond. 1893. Price 7s. 6d. [Messrs. Crosby Lockwood & Son, 7, Stationers' Hall Court, Ludgate Hill.]

When you anatomize Architecture into Art and Science, as some of our friends love to do, it is a mistake to suppose that you place on one side all the romance, and all the prose on the other. There is a world of drudgery to be got through in the art department; and, thanks to the law of compensation, there lurks under the head of "Materials and Construction" a whole realm of magic and mystery. A chemist, of course, can explain anything; but even the symbols of the laboratory do not steal all the miraculous charm out of the processes and phenomena which nature gives to the architect as the means of his craft. By all means, if you will, explain the calcination of rich lime as the expulsion of CO2 from COCaO2, and express the action of setting as the reabsorption by calcium hydrate of its lost carbonic acid gas, but there will still remain to the man of imagination something of the miraculous in the marvellous and almost spontaneous action of the group of agents which we call limes and cements. These things are an ancient mystery; and Vitruvius, when he penned his elaborate and obscure

^{*} TRANSACTIONS, Vol. VIII. N.S. p. 273.

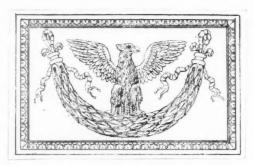
solution of the problem, was probably not the first who had tried to explain the secret. Mr. Sutcliffe, by the way, alludes in his introductory chapter to the passages of Vitruvius bearing on his subject, and it is worth while to mention that in Gwilt's translation of the chapter on pozzuolana there is an unnecessary confusion introduced by the word pulvis being rendered sand. There is no such confusion in the text, and "powder" would adequately represent the state in which the pozzuolana earths are found.

Mr. Sutcliffe must be congratulated on having treated a large, and in many ways a difficult, subject in a thoroughly comprehensive and lucid manner. System in a work of this kind is as vital as it is difficult to secure; the author has made it a primary consideration, and, without in any way disregarding such excellent works as that of Mr. Faija on Portland Cement, one may well acknowledge that this manual fills a long-felt gap. It is careful and exhaustive; equally useful as a student's guide and an architect's book of reference.

After an interesting, though necessarily slight, sketch of the historical aspect of his subject, he proceeds at once to those rudimentary classifications which are so simple when understood, but so vitally important to a grasp of the matter. Concrete is the subject, not cement only, and the author has therefore to deal not only with the differences of the various matrices, but with some account of the aggregates in general use. A recent controversy on the relative value of various aggregates as fireproof material gives additional importance to the study of these ingredients.

Naturally, the chapters on concrete floors are among the most interesting in the book. The fact that concrete floors are, in most modern buildings, carried out, not by the general contractor but by a specialist, who adopts his own methods of construction and applies his own patents, limits the architect both in the opportunities and in the necessity for giving a general study to this aspect of construction. Mr. Sutcliffe, with considerable fairness, has grouped together an account of all the principal systems in vogue (and out of vogue) in this country, and, better still, has gone into first principles, thereby giving his readers an opportunity of forming their own judgment, unbiased by trade circulars, on the respective merits of rival floor manufacturers. He has not omitted to point out that, though we are nowadays accustomed to use floors composed partly of iron as well as concrete, there are many instances, ancient as well as modern, of almost incredible performances in the way of concrete floors unassisted by any other material.

In conclusion, I should add that, besides being eminently readable, this work is elucidated by many illustrations and tables, all of which are good and to the point.—Paul Waterhouse.



SIR F. LEIGHTON'S ADDRESS.

If the critics are silent before an Address delivered by the President of the Royal Academy, it may be taken as a compliment to his learning and eloquence, rather than as any show of deference to his position at the head of the arts of the country. It is, nevertheless, remarkable that so little attention has been paid to the thoughtful discourse on German Art delivered to the Royal Academy students on the 9th inst. The Spectator, which is accustomed, in the season, to devote whole columns to juvenile abuse of successful men, and head them "Art," has not a word about it; nor has The Athenaum, which, by way of novelty, prints a right amusing paragraph in its Fine Art Gossip. The Saturday Review, whose architectural criticisms, in Beresford Hope's time, were often read and sometimes praised, calls it "a very "learned, judicious, and interesting Address on "German art, especially architecture," and stops there; and all that The World has to say about it is that "Sir Frederic" (with a k) "gave one of "his scholarly addresses to the students upon "Teutonic art and its influences upon art in "general,"—the latter portion of this unique sentence evidencing that the writer, if he heard the Address, had not understood it, and, if he saw it in print, had not read it. The Times thinks that its purport "runs counter to the current of " opinion to-day in regard to the growth of art" to wit, the common doctrine that "art will always "be a barren exotic unless it springs from the "people"; but, though the President of the Royal Academy gave several historical facts showing what occurred in the past at certain periods, he deduced no inferences from them in respect to the present.

His description of the introduction into Germany of the "Gothic style" treats of a fact virulently contested even in recent years, and repeats a misnomer which during the fervour of the mediaval revival in this country some enthusiasts tried to correct. He says: "Gothicism supplanted that "national form of art in which Germany had till then [the downfall of the Hohenstaufen Dynasty, about A.D. 1270] expressed her powerful idiosyn.

"crasy"; and he refers to the old superstition throughout Germany that the "Gothic style" was the national home-born style of that country. instancing its retention of the "blackletter"—the Gothic character—as deluded patriotism on the part of the Germans. But is it only in Germany that such a delusion exists or existed? Who has not heard, in good set English phrase, of Scandinavian forests with their rough woodmen, rude precursors of the Gothic architect? Who has not witnessed the indignation with which any attempt to identify English mediæval work with that of France has been received by English archæologists? It was more agreeable to national sentiment to believe that in many different countries, situated at distances more or less remote from each other, designs for abbeys, cathedrals, and monasteries, absolutely identical in form and character, were evolved out of the inner consciousness of inspired builders belonging to separate, and often antagonistic, nationalities. In Sir Frederic's opinion, the correction of such errors,—persisted in against the evidence of history, both written and practical,affords a striking instance of the growth of sound criticism in art within the last generation or two; and it is of no small importance that a great authority should thus acknowledge the debt which Western Europe owes to French inspiration and example in the matchless productions of the twelfth and thirteenth centuries. Indeed, Viollet-Le-Duc made it perfectly clear that during a period anterior to the fourteenth century the arts radiated from the great Abbey of Cluny over every part of France, covered Flanders, crossed the English Channel, penetrated into Germany and Spain, and even entered Italy. But why does Sir Frederic maintain the barbaric title of "Gothic" to designate those arts and the style they developed? What he calls "German Romanesque" has a better racial right, it would seem, to the appellation of "Gothic" than has that scientific evolution of architectonic form and artistically ornamented construction which marks the buildings erected by Frenchmen, and under French influence, during those marvellous two hundred years.

If there is one aspect of the Address which invites the attention of those who have read Sir Frederic's previous discourses, or the more ornate of his after-dinner speeches, it is its prosaic reserve. Only once he bursts into a flight of fancy—when a tuneful knight "struck his harp, sing-"ing blithely of the love of women, boldly too of wrong at Rome." True, he afterwards revolts, as it were, against his own self-restraint, when he condemns Cologne Cathedral because it "smacks of prose and poverty of inspiration." A sole sentence points to the possibility that he has had our present England in his thoughts while discoursing of the German past. He learnt, he says, at Cologne the value of sobriety in the distribution of ornament—"a lesson," he adds,

" which may, perhaps, at this time not be value-"less to my young architectural friends."

Sir Frederic Leighton enjoys an advantage shared by only a very few Englishmen: he can read the literature of the chief European nations, and discuss it, in their own tongues. Perhaps, with innate respect for the fitness of things, he imparted to his latest discourse a grave and reverend solidity of composition somewhat in the spirit of the old linguist, who addressed the Deity in Spanish, whispered Italian to his mistress, spoke French to his man of business, talked English to his birds, and muttered German to his horse, which last was considered a serious animal even before Swift raised him to be a master of men. Or perhaps he recalled the words of Voltaire, who, in a bitter mood, described the Germans as the elders of Europe, the English as grown men, and the French as children. In any case, Sir Frederic has not been unmindful of the responsibility which may be said to weigh on every, even the highest, critic of German art, and he may rest assured that those who can follow the thread of such discourses are much obliged to him for them. May he next compose an Ode to the Birds, and sing it lustily! For the English are men enough to bear unpalatable criticismcriticism, moreover, which ought to be scathing if judged by that he has meted out to the Germans. Seriously, it may not be amiss here to express a hope that before long he will take for his parable the work of his own time--reviewing the great Victorian age of antiquarianism and revival, and extracting from his many-sided experience deductions which will be eminently useful to architects and students of architecture over all thatportion of the globe inhabited by the Englishspeaking race. The subject will undoubtedly be a difficult one, and the task may appear thankless, at least for a time: but no one could accomplish it better, or make fewer enemies in the doing, than Sir Frederic Leighton; nor would any advice of the sort be more respectfully received, by those personally interested, than his.

PUBLIC HEALTH (LOND.) ACT 1891.

BY-LAWS MADE BY THE LONDON COUNTY COUNCIL.

The By-laws which passed the Seal of the London County Council on 22nd June 1893, and were "allowed" under the provisions of Section 114 of the Act by the Local Government Board on the 28th of the same month, are made under Sections 16 (2) and 39 (1) of the Public Health (London) Act 1891. It will be interesting to architects to know that the first draft of the proposed By-laws was referred to the Institute for consideration, and that numerous amendments were suggested in a long report, dated February 1893, sent to the London County Council.

Many of these were adopted and embodied in a revise, which was again considered and reported on by the Institute in May 1893. This report was sent to the County Council and also to the Local Government Board in that month, and the outcome of this report is referred to later on.

The sub-divisions of the By-laws under Section 16 (2) are four, namely:

1. Prescribing the times for removing fæcal and offen-

sive matter, and the way of doing it.

2. As to the closing and filling-up of cesspools and privies. 3. As to the removal and disposal of refuse, and as to the duties of the occupier of any premises in connection with house refuse, &c.

4. Penalties.

With the first and fourth of these, architects

have nothing to do.

The second, architects must bear in mind, because in pulling down old houses even in the heart of London it is very common to discover cesspools not only within the curtilage of a building, but within the building itself. The requirement renders compulsory the emptying of "disused or " unnecessary cesspools and privies of all fæcal or " offensive matter and the complete removal of so " much of the floor walls and roof of such privy " or cesspool as can safely be removed, and all " pipes and drains leading thereto or therefrom or "connected therewith, and any earth or other " material contaminated by such fæcal or offensive " matter," the filling up of the cesspool with "dry " clean material," and where the walls are not completely removed the covering with a layer of good concrete, six inches thick, of the surface of the space filled up. Presumably every cesspool is unnecessary where sewer drainage is available within the prescribed distance. In the original draft the removal of all parts of the cesspool was insisted on, but the Institute pointed out that in loose and sludgy soil such an operation might be dangerous to adjacent buildings: hence the pre-

As to the third sub-division, the only comment necessary is that By-law No. 7 and another By-law, No. 16, under Section 39 (1) practically sound the doom of the old brick dustbin of unsavoury odour.

The By-laws under Section 39 (1) are :- "With " respect to water-closets, earth closets, privies, "cesspools, and receptacles for dung, and the " proper accessories thereof in connection with " buildings, whether constructed before or after the " passing of the Act." Every architect should study these carefully, because they impose restrictions and rules which affect the actual planning of a building as well as the areas of windows, the construction of closet partitions, &c. They also regulate the position of, and mode of building, external privies, cesspools, dung receptacles, &c.

In addition to these structural matters there are minute regulations as to sanitary apparatus, water

and soil pipes, and traps.

Speaking broadly, and with the few but important exceptions to be noted further on, the new By-laws will be found to be sound and correct in principle, conceived in the spirit of the Act under which they are made, and in accord with the best modern sanitary practice. They will be found to contain little that differs from what thoughtful architects habitually do in their works, but, it is needless to say, much that differs from the practice not only of the jerry-builder, but also of the unscientific, though artistic, architect.

There is one regrettable feature: there is no power reserved by which the County Council may vary any parts of the By-laws in special cases where it will be found in practice impossible to apply them. We have here cast-iron legislation that must break if it is found impracticable, as it lacks the elasticity of dispensary modification.

In studying the By-laws it must be always borne in mind that they relate to buildings "whether constructed before or after the passing " of the Act "-vide Section 39 (1).

Now let us consider the effect of this by taking

the Act and By-laws together.

Under Section 1 of the Act itself it is "the duty "of every sanitary authority to cause to be made "from time to time inspection of their district . . . "to ascertain what nuisances exist . . . and to "enforce the provisions of this Act for the purpose "of abating the same . . . so as to secure the "proper sanitary condition of all premises within "their district." The term "nuisance" is of such wide application that an interference with personal comfort has been held to come within its definition (G. W. Ry. v. Bishop, L.R. 7 Q.B. 550). Section 2 defines among other things as a nuisance—"Any premises (this word means not "only a building, but everything within its curti-"lage) in such a state as to be a nuisance or "injurious or dangerous to health."

Section 40 authorises domiciliary visits, when (Sect. 44) if anything is found "not to have "been made or provided . . . according to the "By-laws of the County Council and sanitary "authority, and to the directions of the sanitary "authority . . . or to be contrary to this Act,"

it must be altered.

The net result is, apparently, that every closet in London, old or new, which does not conform to No. 1 By-law, must be condemned by the sanitary authority, and altered so that it shall conform.

Let us see the effect of No. 1 on a site entirely covered on the ground floor with buildings, as probably 90 per cent. of shop sites are in the centre of London, as permitted by Section 14 of the 1878 Act. On such a site no closet can hereafter remain below the level of the first floor. It is true that the final proviso appears to give a power to construct a basement w.c., but it is under conditions which hardly exist in such sites.

In the original draft this proviso did not exist

at all, but the Institute suggested its necessity, and proposed that the minimum width of area should be 3 feet, ventilated by a grating over or immediately adjoining the w.c., of the same area as that required for a window. This recommendation was pressed, on the ground that it is probable that not 5 per cent. of such areas are more than 3 feet wide, as that was a minimum fixed by Section 103 of the Metropolis Local Management Act, 1855, for dwellings, and has been very generally adopted in other buildings.

The effect therefore of the Act and By-law appears to be that no w.c. can longer exist, or can be constructed in the front areas of the large majority of shops, except in the improbable event of a local authority consenting to the increase in the width of existing areas to 5 feet under the public way, and allowing an area of 40 feet super-

ficial to be only covered by a grating.

This result not only affects matters constructional, but matters of legal tenure. It is of course well known that in a large number of cases shopkeepers do not live over their shops, but take leases of the shop and basement alone, the rest of the house being separately let and having its separate entrance, a condition of things legitimate in itself and recognised by the 1855 Act. What is the position of the tenant of a shop covering the whole area of a shallow site? Under the first paragraphs of By-laws Nos. 1 and 2, he cannot have a w.c. lighted only from the roof; under the last paragraph of No. 1 he cannot practically have one in the basement; he cannot get access to the upper part of the house, for that is let to others. He must therefore pull down a part of his ground floor at the rear not less in area than 100 feet superficial, and thus sacrifice the retiring room of the employés; or he must build a w.c. in the front of his shop, thus reducing his window and making a direct access from a w.c. into the shop—perhaps a provision warehouse.

The creation of an open yard in lieu of a retiring room is by no means an unmixed blessing. It becomes a lumber yard—a neglected space shut in by walls. It would seem preferable from the points of view of sanitation and decency that the w.c. should be placed on the ground floor in a retiring room at the back, as might quite properly be done, provided that the closet has in the roof a lantern light of which at least 2 square feet on each of two opposite sides shall be glazed, and at least 1 square foot on each of such sides shall be made to open for ventilation, and also that it have an inlet by means of a valved tube not less than 54 inches in sectional area for fresh air, taken from above the roof down to the floor-level of the closet. A circulation of air would thus be obtained superior to that arising from a window only.

Another effect of the last paragraph of No. 1 is to prohibit the formation of a w.c. opening into the area "4 feet wide" required, as a minimum,

to exist in front of a separate underground dwelling [see 96 (c) of the Act], although that Section (Sub-sect. h) requires the use of a closet to be "appurtenant" to such dwelling. It is manifest that a separate underground dwelling may be, and often is, entered externally from the area, and it is most convenient that the w.c. should be on the same floor level. It therefore appears that to gain this end on a site having a frontage of say 20 feet, the area already increased from the 3 feet of the Local Management Act to 4 feet by Section 96 of this Act, must in fact, if the By-law is valid, be further increased to 5 feet, a result which the Act certainly did not contemplate.

No. 3 properly requires that a cistern directly connected to a w.c. shall be distinct from that used for drinking purposes, and of course this is complied with by the use of a small flushing cistern in the w.c. itself. It prohibits the D-trap and other similar traps, and also apparatus of the "pan" type, and requires an anti-syphon pipe where two or more closets are connected to one

soil pipe.

No. 4 deals with soil pipes. In a building "hereafter erected" a soil pipe must be "situated Let us take a house "outside such building." in one occupation built in accordance with Section 14 of the 1878 Metropolis Management and Building Acts Amendment Act. The whole of the site on the basement and ground floors is covered with building, and on the upper floors there is at the rear an area of not less than 100 square feet. On the upper floors there are w.c's near the back wall, which comply with By-laws Nos. 1 and 2. The house is burnt down and has to be rebuilt, but to comply with No. 4 either the owner must sacrifice his ground floor and basement blocks, or he must give up the closets, because he cannot cause the soil pipe from them to be situated "outside his building in "respect of the two lowest storeys." He can of course make it external by building an open brick shaft or small well for the pipe, which shaft, if large enough to get at the pipe for repairs, would become an unsanitary receptacle for snow, dust, dead vermin, &c .- a neglected "dustbin," in fact. If this expedient be not resorted to, practically it would appear to follow that the w.c.'s must be placed on the road front, and must have the soil and ventilating pipes carried down outside the wall and shop pilasters. These would have to be cased for protection from wilful as well as accidental damage, and, in very exposed positions, to prevent frost-to the great detriment of the architecture, and to the inconvenience of the public when repairs have to be done to the pipes.

It would appear to answer all sanitary purposes if for new and old buildings the soil pipe were external "wherever practicable." It is desirable to put a soil pipe outside, but in cases like the above there can be no more danger arising from the piece of soil pipe in the house than from a horizontal soil pipe or drain under it. Both must

be gas and water-tight.

Passing over many By-laws of no technical interest, we come to No. 26. This specifies for lodging-houses that one closet shall be provided for every twelve persons. It would have been desirable, if possible, to have fixed at the same time the proportion in the case of a factory (Section 38), and the Institute suggested the following addition :-" In the case of a factory, workshop, or workplace "there shall be water-closet, earth-closet, or privy "accommodation in the proportion of not less "than one closet or privy for every twenty persons "of either sex employed in or in attendance at " such factory, workshop, or workplace, but in no "case shall there be less than two closets or "privies if there be more than twelve persons in "all so employed." If no regulation is made we may find that every local authority may fix a different standard, or may fix none at all. Great confusion and inconvenience in planning buildings will necessarily follow.

Leaving the consideration of the house proper, we turn to the By-laws which deal with cesspools. The existence of laws relating to cesspools recognises that they are a necessity in certain cases where sewers do not yet exist. In the London County they may be reasonably considered as temporary outlets for sewage. They are, during the earlier stages of the building development of a new district, the only practicable method of drainage, and when it is developed they give place to a system of sewerage, the cost of which could not properly be incurred until it was known that

the "development" would continue.

No. 20 requires every cesspool to be "at a dis" tance of 100 feet at the least from a dwelling. "house or public building, or other building in which any persons may be or may be intended to be employed in any manufacture, trade or business." No. 22 requires the cesspool to be "ready of access" for cleaning, to be watertight (although it specifies and only permits a mode of construction which very often fails to retain that quality), and does not permit of its having "any means of "communication with any sewer or any overflow outlet," and No. 26 says, "the occupier of any premises shall once at least in every three months cause every cesspool belonging to such "premises to be emptied and thoroughly cleansed."

For any ordinary building one cesspool is usual, and it is not convenient to empty it more frequently than at three months' intervals. In practice, therefore, the size will be calculated on these bases. Why a well-ventilated cesspool that is wateright need be "100 feet at the least" away from a house is not clear from a sanitary point of view. In by far the larger number of new houses it is not usual to have gardens 100 feet deep on the

roadside, because they are too exposed to view to be of value to the family as places for recreation, and are consequently a wasteful expense. It will generally follow that the 100 feet must be measured at the rear of the house, thus rendering the cesspool anything but "ready of access," and necessitating the carrying of all its contents past the house, with the risk of spilling the sewage en route to the road. I am not now dealing with large grounds where the sewage can be utilised on the land, or where there is a roadway at the side of the house, but with an ordinary suburban villa.

Again, it not unfrequently happens in the suburbs that the land on which a house is built rises from the road. It is manifestly objectionable and expensive to have the drain gradient running against the natural slope, necessitating possibly a tank twenty-five feet below the ground 100 feet from the house. To ventilate such a tank is difficult, to clean it out both difficult and costly, and not very good for the men employed. It would seem to be much better to put the tank close to the front fence, where it can easily be ventilated and readily cleaned out (without the necessity for being entered at all) by means of one of the well-known closed vans having a hand pump and suction pipes attached (on the fire-engine principle) used by many local boards. Another great advantage of this position is that when the public sewer is ultimately made in the road, the drainage has simply to be disconnected from the cesspool and carried on to the sewer. In the other case, the whole of the drainage must be re-done at great inconvenience, and at a perfectly unnecessary outlay to the house owner.

For these reasons the Institute recommended that the 100 feet should for the general rule be reduced to 50 feet, and that the following alternative should be added to clause 20, "or in case of "a building not less than 30 feet back from any "road such cesspool may be constructed close to

" the said road."

In summing up my comments I think there is one point which all sanitary reformers should bear in mind, and that is that sanitation is highly commendable as a servant, but must not be exalted to become a fetish. It is desirable that a broader view should be taken of a house or place of business than that which seems to regard it only as a shell to enshrine a water closet. After all, sanitary accessories are made for man, not man for them. With this reservation the laudable attempt to improve the hygienic condition of London deserves the approbation of every architect, and the public authority may, I am sure, always count on the sympathy and co-operation of the Institute in this aim. It is not unfair to take to our Practice Committee the credit for having ungrudgingly placed the ripe practical experience of its members at the service of the public as a jury of experts.

Perhaps it may transpire that the bearing of those special points in the By-laws which I have criticised has not been fully apprehended by those who drew the By-laws. Already those persons who have begun to feel the pinch of Nos. 1 and 4 are inquiring if it is possible that the requirements can be actually "law." As soon as effect is given to them by the local authorities as the Act directs, it is probable that the outcry will be

so great that they must be modified.

I have but one comment more to make, and that is, as to the way in which these By-laws have come into force. They are required to be confirmed by the Local Government Board, "which "Board is hereby empowered to allow or disallow "the same as it may think proper," and provision is made for full previous publicity in regard to the By-laws for which allowance is sought. The manifest intention of this would appear to be to give persons the power to make objections or suggestions in respect to such By-laws, and that those objections or suggestions should be independently considered by the Board before such allowance is given. It is proverbial that specialists not unusually get into a groove, and exalt their speciality to the prejudice of every other consideration. It would seem probable that the Legislature, in view of this, recognised the necessity of a controlling power that would take a broader view than any specialist, and would subordinate his views to others of different but equal importance.

The Institute's objections to and suggestions for the revised draft By-laws were sent, as in courtesy bound, to the County Council, and then to the Local Government Board before the end of May. The Board in their reply dated 30th June, i.e. more than a month after the receipt of the document, said: "The Board forwarded a copy of "your communication to the London County "Council for their consideration of the suggested "amendments to the By-laws. The County "Council however, have not at present adopted "any of these amendments; but they state that "they have taken note of such of the suggestions "as appear important, and that should it at a "future time be found necessary to revise the "By-laws these suggestions will receive further consideration. The County Council have now "submitted the By-laws for confirmation, and the "Board have confirmed them."

It would appear, therefore, that the Local Government Board, instead of exercising an independent judgment—acting as a Court, to "allow or disallow as they may think proper"—in so important a matter as these By-laws, have merely referred our criticisms to and accepted the judgment thereon of the body whose draft was criticised on technical grounds of public importance. The principle involved is one the importance of which, I trust, will be my apology for referring to it.—Edwin T. Hall.



9, CONDUIT STREET, LONDON, W., 21 Dec. 1893.

MINUTES. IV.

At the Fourth General Meeting (Ordinary) of the Session, held on Monday, 18th December 1893, at 8 p.m., Mr. J. Macvicar Anderson, President, in the chair, with 22 Fellows (including 8 members of the Council), 20 Associates, 1 Hon. Associate, and 25 Visitors, the Minutes of the Meeting held 4th December 1893 [p. 86], were taken as read and signed as correct.

The following candidates for membership, whose nominations had been previously approved by the Council, were recommended for admission: —As FELLOWS [F.R.I.B.A.], Benjamin Ferdinand Simpson (Newcastle-on-Tyne), Charles James Smithem, and Walter Hilton Nash [A.]; as ASSOCIATE [A.R.I.B.A.], John Alexander Russel Inglis (Edinburgh); and as HON. ASSOCIATE, James Roger Bramble,

F.S.A. (near Yatton, Somerset).

The following member, attending for the first time since his election, was formally admitted and signed the Register of Fellows, namely: —Thomas Jerram Bailey [F.].

The President announced the results of the Examination held during the week commencing 27th November 1893, and read the names and addresses of 31 persons who had qualified for candidature as Associate [pp. 115-16]. The President further announced that the Ashpitel Prize was awarded to Mr. Ernest Robert Barrow; and that additional prizes of books to the value of five guineas respectively were awarded to Ernest Edward Fetch (Cambridge) and John Alexander Russel Inglis (Edinburgh).

A Paper by Mr. William Simpson, R.I. [H.A.], on The Classic Influence in the Architecture of the Indus Region and Afghanistan, was read, in the absence of the author, by the Secretary, and the Paper having been discussed, a Vote of Thanks to Mr. Simpson was passed by acclamation, and the Meeting adjourned at 10 p.m.

ERRATA.

Description of Mr. Falkener's Drawings [pp. 86-88]. Page 87, No. 22, for three steps read three storeys.

", ", No. 25, for river cataracts read River Cataractes, ", 88, No. 35, for mixed with oil spots read ruined with oil spots.

PROCEEDINGS OF ALLIED SOCIETIES. SHEFFIELD: MONTHLY MEETING.

On the 12th inst., at the ordinary monthly meeting of the Sheffield Society of Architects and Surveyors, Professor Anderson, of Firth College, delivered a lecture on "The "Architecture of Dalmatia, Roman and Renaissance." Commencing with a short historical account of the country, he described its position and character, and the important part it played during classical and mediæval times, and dwelt especially on the importance of the Venetian influence as testified in many of the buildings during those periods. The purpose of the curious projecting towers of the Amphitheatre at Pola was discussed, and the buildings in the various towns were described in detail. An interesting account followed of the palace of the Emperor Diocletian at Spalato; and the lecturer concluded with a description of a Christian Basilica in Dalmatia, built on the site of an ancient graveyard, at the exavation of

which he had been present. The lecture was illustrated, by the aid of lantern slides, with photographs taken by the Professor in the district under discussion.

GLASGOW.

Mr. W. J. Anderson's Lecture's.

Not the least interesting feature in connection with the architectural curriculum now in operation at the Glasgow School of Art is the series of lectures in course of delivery by Mr. William J. Anderson [A.] on "Italian Renaissance "Architecture," The initiatory lecture, which was given on the 25th October, was presided over by Mr. W. Forrest Salmon [F.], President of the Glasgow Institute of Architects, supported by Mr. Campbell Douglas [F.], Mr. T. Lennox Watson [F.], Mr. Francis Newbery, head-master, and other members of the Glasgow Institute. The lecture had for its purpose a review of the architecture of Italy from the earliest times to the end of the Roman Empire. It was shown how Etruscan art directed Roman architecture up to the conquest of Greece and her colonies, when the more powerful influence of the latter began to have full sway. Yet Roman art could not be described as having been derived from Greece. It was a combination or attempted fusion of the Etruscan and Greek principles, but was never logically worked out to its conclusion, and the Renaissance architects only carried it farther, without having entirely solved the problem. The time of Trajan was believed to be the best period of Roman architecture. The Pantheon, often called the Rotunda of Agrippa, and believed to be of the reign of Augustus, was now thought from discoveries made as recently as last year to be of the latter part of the second century. Illustrations were given of the exterior and interior of this, the finest work of the Romans; and, altogether, about sixty slides were shown by the lantern, including the temples of Pæstum, the Forum at Rome, the Basilica of Constantine, the Baths of Caracalla, &c. considerable part of the lecture dealt with the essential distinctions between Greek and Roman methods and principles, and concluded by noting the constructive ingenuity of the Roman structures of the second and third centuries. At this time the separation between construction and decoration was complete, the concrete and brick shell being built independently, leaving the marble or stucco envelope to be applied afterwards. In this the lecturer thought there was a lesson for the present time. It might not be the noblest manner of building, but it was perfectly legitimate, and capable of wonderful architectural effects, as the restoration of the Baths of as the Romans had, it was a much more economical method of structure, and thus left resources for decoration such as could never otherwise have been entertained. It was more reasonable than, and at least as artistic as, the Greek method of rearing masses of most costly marble and limestone, and then covering them with colour or with decorated stucco. Views and descriptions of the Roman Colosseum concluded the lecture, Mr. Anderson remarking that his special subject was to consist in what was, both literally and metaphorically, built out of its ruins. worse title, he said, might be given to the subject than that of "The Stones of the Colosseum," although, as a matter of fact, the earlier Renaissance had a long career before any approach to the Colosseum was attained.

The second lecture of the series was delivered on the 15th ult., the special division treated of being the Early Christian and Mediæval Architecture of Italy. A general view of this long period was considered necessary, as the architects of the Renaissance were influenced by mediæval work to a degree seldom realised. Beginning with a brief historical review, the lecturer went on to discuss at some length the growth of the early Church buildings. These were believed to be, not, as generally supposed, the

outgrowth of the Roman basilica or Law Court, but a development of the form and arrangements of the Roman dwelling-house, of which plans were shown and compared with those of early churches, as well as with the Roman The early acrangements of choir and apsidal basilica. seats of the clergy were shown as they exist at San Clemente in Rome, and Torcello, near Venice. Passing to the true Romanesque period, the contrasts presented by contemporary work in different parts of Italy were noted, and accounted for by the variety of races which inhabited the country, and the modifications they exercised on the Latin element which lay under them all, and which, in the revival of the classical forms in their purity, found the only outlet that satisfied it. Thus the churches of San Miniato at Florence, St. Mark at Venice, and San Zeno at Verona, erected almost at the same time, represented the three distinct types of Romanesque, Byzantine, and Lombard, which in other buildings were more or less commingled. The same diversity characterised the Italian Gothic, which, although it produced buildings or parts of buildings unrivalled in beauty, scarcely attained the cohesion of a distinct style. Introduced from Germany, the Italians never could have had any fondness for it, and certainly Probably they never grasped its aims and principles. never desired to do so, fancying that they were translating it into classical language. The survival of Roman forms was its greatest peculiarity, and in Venice especially the infusion of Arabic or Saracenic influence.

The third lecture, delivered on the 6th ult., treated of the Origin and Progress of the Renaissance, with special reference to Florentine work. The lecturer defended the earlier Renaissance from the charge of being wholly an imitative style, pointing out that emulation rather than imitation was its ruling principle, and that it was a true reflection of the temper of the times. The theory that with the Gothic style architecture as a living art died, which had been popularised by Mr. Ruskin and by our greatest critic Fergusson, and reiterated by Mr. William Morris, was controverted. It was shown that the Italians, though they went back to Rome for their principles and details, built up a new style, as different in its best examples from Roman as Roman itself was from Greek. There was no greater contrast between the Greek Parthenon and the Colosseum than there was between the Colosseum and the Palazzo Strozzi, and originality was never displayed to a greater degree than by Brunellesco and some of his The previous tendency to naturalism in sculpture was only a preparation for the renascence which followed, and it was left for Donatello, under the influence of Brunellesco and the ancient masters, to grasp the true place and principles of sculptural art. The greater part of the lecture was devoted to an analysis of the early Florentine style, with upwards of forty illustrative examples by lantern, including the works of Brunellesco, Michelozzi, Alberti, and Andrea Sansovino.

The fourth lecture was delivered on the 20th inst. the subject being the Early Renaissance out of Florence, with special reference to the Milanese and Venetian schools.

PARLIAMENTARY.

Height of Buildings, &c., in London.

Mr. Arthur Cawston [A.] and Mr. William Woodward [A.], referring to the Report of the Practice Standing Committee [p. 91], forward the following observations:—

The absence of any definite laws as regards the height of corner buildings in the metropolis is well known to be constantly creating friction and animosity against our County Council. It therefore seems surprising that no clause which would terminate this unnecessary friction appears in the special report of the L.C.C. Building Act Committee, which appeared in the JOURNAL of the 7th inst.

This question of curtailing the height of buildings on corner sites is, no doubt, of extreme importance to the appearance and wealth of the metropolis.

In the first place, such sites are known to possess more value for building purposes than others, not only because of the better architectural effect that can be produced on them, but also because of the extra light that can be obtained—an important consideration when arranging a suite of offices.

As regards the importance of such sites for the architectural appearance of the metropolis, one realises the drawbacks that must ensue (if the buildings on corner sites are to be curtailed) immediately one remembers that classical architecture, whether of terraces or of single buildings, can only be effective if the angles of the façade are accentuated. One sees this at the National Gallery, Somerset House, the Home Office, Burlington House, the Conservative Club, Carlton House Terrace, Grosvenor Place Mansions, York Terrace, Regent's Park, the Classical groups in Regent Street, and wherever good classic exists. Without doubt, much of the dignity of such façades would disappear if the height of the corners were reduced.

It seems to me, too, that the disadvantages of lofty corner buildings have been over-rated. The façade to the wider street is allowed to be built higher than the façade to the narrower street, because of the greater amount of light and air which comes from the wider space. But the first window round the corner, being close to the angle, reaps even more benefit from the wider street than those windows which face it, for this side-window has a view right down the length of the wider street. In the same way with the second window from the corner; and, according to the width of the side-street, so is the benefit of looking down the wider street extended further and further from the corner.

As to the disadvantage from lofty corner buildings that might accrue to the houses further down the side-street, if the corner house has the proper amount of vacant ground in its rear, this disadvantage is practically infinitesimal. Doubtless for these reasons the Parisian by-law as regards corner houses was framed as follows: A building at the corner of streets of unequal width may return at its full height along the narrower street for a distance not exceeding three times the width of the narrower street.

Closely allied to this question of the height of corner buildings is the question of the line of frontage they should follow in the side-street, and I submit that the balance of the advantages of allowing them to come out to the extreme boundary of the side-street overbalances the disadvantages, especially when one remembers the open space required at the rear of every building. The present attempt to keep back these corner buildings has serious First, the loss of valuable ground on the disadvantages. most valuable building sites in every neighbourhood if the by-law is followed. Secondly, the ease with which the by-law is evaded. This is often done when laying out an estate, by first building the corner houses and placing them at the extreme edge of the side roads, thus creating the official line of frontage all along the side-road at the extreme edge of the roadway. Thirdly, and in consequence, although the majority of houses may be set back some ten or twenty feet behind this official line of frontage, it is open to any one to bring forward his house to the official frontage, thus damaging his neighbour who has set his house back.

Although the right of corner houses to come out to the extreme edge of the side-roads might be recognised, a by-law should certainly forbid these houses from creating the official frontage line in the side-roads.

Doubtless clause (d) [p. 92] might cause hardships even if compensation were paid for the land taken; but would not the disappointments and opposition to setting back be lessened if an organic plan of improvements were decided upon, and always open to inspection, for then no doubt could exist as to why and where the new lines of frontage

were being formed? Another advantage of such a plan would be this. Supposing the proposed by-law be passed without an organic plan, and eventually all the existing streets are widened to the extent of 40 feet, even then London would not be a convenient or handsome city. What London really wants for the convenience of our enormous traffic is more main arteries going from one busy centre to another, and the by-law under consideration can only help forward this great want in conjunction with an organic plan. Without an organic plan it will again result in mere tinkering.

As to the wording of clause (d)—does not this imply that

As to the wording of clause (d)—does not this imply that all existing buildings in old streets shall be set back at once? And what if buildings are "erected anew" on foundations? Would these latter come under the clause? I think not. Surely the present wording seems to form an open gate through which the proverbial coach-and-four could be driven. Would the following be too exact—"Every new "building, reconstruction, or addition to any old building on "land abutting on any public thoroughfare shall"?

"land abutting on any public thoroughfare shall"? The Practice Standing Committee state that "The "powers under which the Commissioners of Sewers in the "City of London are enabled to acquire either whole sites or portions of them for the purposes of public improvement in cases of rebuilding are believed to have acted equitably to the owners of property and satisfactorily to the public." This is well worthy of noting, as it affords architects a powerful argument in favour of extending over the whole metropolis those many powers already possessed by the City Corporation—powers which have cost that Corporation labour, and delays extending over centuries, to extort from Parliament.—Arthur Cawstox.

The clauses which have issued from the Building Act Committee of the London County Council appear to me to have been somewhat insufficiently grasped by the Practice Standing Committee in the Report published in the last issue of the Journal. In my opinion those clauses are not altogether "satisfactory and necessary additions "to the powers of the London County Council," and I do not think the Institute, as a body, "should give support "to them generally in principle."

"to them generally in principle."
Clause (a) brings old buildings into the same category as new buildings; and clause (b) would give the London County Council power over buildings even if erected in a park, because "domestic buildings" are not defined, and the "light and air" part of the clause demands very careful consideration.

Clause (c) is distinctly of a confiscatory character, and the words "fair price" referred to by the London County Council means very little if left only to the County Council to determine.

Clause (d) has been rightly appreciated by the Practice Standing Committee; and clause (e) leaves it entirely to the London County Council to determine what an "ade-"quate" internal area may be, as they are to determine the "dimensions of the same." I presume that means the dimensions of the areas, the exercise of which power may very easily ruin a building site.

Clause (f) should certainly have a right of appeal attached to it; but why the Practice Standing Committee should state that clause (g) is a "useful and valuable "regulation" I cannot understand. It may be made the medium of taking away, without any compensation whatever, most valuable private property. "Proper safe-"guards" may be construed in the most elastic fashion, and, bearing in mind the present humour of the London County Council, the very notion of "closing or diverting "useless roads, paths, or rights of way" should have led the Practice Standing Committee to have at least recommended that the word "useless" be defined, and that no

road, path, or right of way be closed until after careful inquiry by an independent tribunal, and that adequate compensation be made for all land taken. - WM. WOODWARD.

The Rural Poster.

A Bill, backed by Mr. Caine, Mr. Curzon, Sir T. Sutherland, Mr. John Burns, Mr. Birrell, and Mr. Jacob Bright, will shortly come before the House of Commons, the object of which, the preamble states, is to prohibit the raising of unsightly erections which destroy the beauty of the rural scenery in Great Britain and Ireland. The Bill provides, shortly, that no picture, printed or written matter, or any advertisements or signs whatsoever shall be exhibited upon any highway, footpath, canal, river, &c., so as to be visible to any person being on or passing along the same. Any breach of the Act is to render the offender liable to a fine of £5, to be recovered in manner provided by the Summary Jurisdiction Acts. The Act, however, is not to apply to any place within the boundaries of any Parliamentary or municipal borough, or within the district of any urban sanitary authority; or to any place within the precincts of a railway station, pier, or landing-place, or to any guide or sign-posts erected by or with the sanction of any public authority, or by any railway company; nor to advertisements affixed to a dwelling-house, or erected by any person upon land in his occupation to advertise a business or trade bond fide carried on by him upon that land, or to advertisements for the sale or letting of lands or tenements upon which the advertisements are displayed.

LEGAL.

Ancient Lights - Obstruction - Injunction or Damages.

MARTIN T. PRICE.

This was an action brought by the plaintiff, who was lessee of a house in Birmingham under a lease of which about twenty-nine years were unexpired, to restrain the defendant from erecting, or permitting to remain erected, upon certain land opposite to the plaintiff's property, any house or other building to or at a greater height than the former buildings upon the same premises, which had been recently pulled down by the defendant, in such manner as to darken or obstruct the plaintiff's windows, which were ancient lights. The plaintiff's house was sublet to various tenants at a rental of about £490. The freeholder was not a party to the action. The evidence showed that the building which had been erected by the defendant sub-stantially interfered with the plaintiff's ancient lights, but there was no evidence to show that the selling or letting value of his property during the remainder of his term would be thereby interfered with or injured.

Mr. Warmington, Q.C., Mr. Renshaw, Q.C., and Mr. Micklem appeared for the plaintiff; and Mr. Marten, Q.C., Mr. Jelf, Q.C., and Mr. Ingpen, for the defendant.

Mr. Justice Kekewich delivered judgment on the 18th ult., holding that, the action being by a lessee with only a short term to run, the case was one in which the Court should not, in the exercise of its discretion, grant an injunction. His lordship therefore gave judgment in favour of the plaintiff for £120 damages and costs.

The Building Line A New Point.

WENDON T. THE LONDON COUNTY COUNCIL.

This was an appeal from a decision of a metropolitan police magistrate in a case raising a fresh point as to the effect of the building line section (75) of the Metropolis Local Management Amendment Act 1862 (25 & 26 Vict., c. 102). More than six months before proceedings were instituted a building owner put in the footings of the walls of a corner house in a new street at a sufficient distance from the centre of the street. He subsequently built up a

row of houses in the same street, which he set ten feet further back, and thereby created a building line in the He sold the corner lot, and when the purchaser began to raise walls on the footings he was prosecuted by the County Council for building in front of the building line without license. The magistrate convicted, but stated a case for the opinion of the High Court, which came on for hearing before Mr. Justice Wills and Mr. Justice Wright on the 28th ult.

Mr. R. Cunningham Glen, for the defendant, contended that at the time footings were laid there was no building line fixed, and so there could be no offence. The former line fixed, and so there could be no offence. owner had an absolute right to erect the house on that site, and the new owner had the same right.

Mr. Avory, for the County Council, contended that the building line had been fixed in accordance with the owner's line of building in the row of houses he had built in the same road

The Court held that, as nothing substantial had been done on the corner lot before the new building line was erected, the case of Auckland v. Westminster Board of Works, on which the defendant relied, did not apply, and that he was liable, on the wording of section 75, for the erections made by him.

Sky Signs: Counsel's Opinion.

The clause dealing with sky-signs in the London Council General Powers Act 1893, by which the London Sky Signs Act has been to some extent modified, has led to notices being served on a large number of tradesmen and shopkeepers in the metropolis, alleged to have infringed the provisions of the Act. The Licensed Victual-lers' Protection Society, whose clients figure somewhat largely among the victims, have instructed their solicitors, Messrs. Maitlands, Peckham, & Co., to consider and report upon the alteration in the law thus effected. Their report may not be without interest to district surveyors, and, as recently published in The Morning Advertiser, is as follows:-The definition of a sky-sign is not materially affected by the recent Act, and it must still be "visible "against the sky from any point in any street or public "way." The only material alteration effected by the Act is that boards fixed upon the parapet or cornice of any building, or to the ridge of any roof, must not be more than three feet in height. We have been informed that district surveyors in some parts of London have taken advantage of the new Act to once more endeavour to drag into their net signboards affixed to the walls of houses but not placed upon the parapet. We have no hesitation in advising that showboards or signboards affixed against the walls of houses, and not being upon the tops of houses, cannot, in any case, come within the operation of the Acts. Nothing comes within the Acts unless it is "visible against the sky from some point in a street or "public way." If the line of vision be limited by bricks and mortar or other solid substance, it is not a sky-sign. The very name "sky-sign" truly expresses the kind of thing aimed at by the Acts. The only things to which shopkeepers need turn their attention are showboards fixed upon the tops or parapets of houses and being more than three feet in height. As to these, the owners may either remove them or replace them by others not exceed ing the statutory limit of height, or they may apply to the district surveyor for the necessary certificate. It is important, however, to remember that such certificate will only last two years, at the end of which time a further certificate for two years must be obtained, making four years altogether. At the end of the four years the sky-sign will have to be removed. Speaking broadly, public-house showboards, in the positions in which they are generally fixed, do not come within the Acts, but when placed upon the top of the house they must not exceed three feet in

